c. 2

UNIVERSITY OF MIAMI

Sea Grant Program
(Law)

Legal Problems Regarding the Extraction of Minerals (Including Oil and Gas) From the Continental Shelf

Walter J. Mc Nichols

Sea Grant Technical Bulletin Number 14

March 1971

Sea Grant Technical Bulletin #14

LEGAL PROBLEMS REGARDING THE EXTRACTION OF MINERALS (INCLUDING OIL AND GAS) FROM THE CONTINENTAL SHELF

Walter J. McNichols

University of Miami Sea Grant Program (NSF Sea Grant - GH 100)
Miami, Florida, 1971

The research presented in this bulletin was submitted as a thesis in partial fulfillment of the requirements for the degree of LL.M. (Master of Laws) in Ocean Law.

Library of Congress Catalog Card Number: 71-157084

Information Services
Sea Grant Institutional Program
University of Miami
10 Rickenbacker Causeway
Miami, Florida 33149
1971

PREFACE

The Sea Grant Colleges Program was created by Congress in 1966 to stimulate research, instruction, and extension of knowledge of marine resources in the United States. In 1969, the Sea Grant Program was established at the University of Miami.

The outstanding success of the Land Grant Colleges Program, which in 100 years has brought the United States to its current superior position in agricultural production, was the basis for the Sea Grant concept. This concept has three objectives: to promote excellence in education and training, research, and information services in the University's disciplines that relate to the sea. The successful accomplishment of these objectives will result in material contributions to marine oriented industries and will, in addition, protect and preserve the environment for the enjoyment of all people.

With these objectives, this series of Sea Grant Technical bulletins is intended to convey useful research information to the marine communities interested in resource development.

While the responsibility for administration of the Sea Grant Program rests with the Department of Commerce, the responsibility for financing the program is shared by federal, industrial and University of Miami contributions. This study, Legal Problems Regarding the Extraction of Minerals (Including Oil and Gas) From the Continental Shelf, was made possible by Sea Grant support for the Ocean Law Program and a University of Miami Graduate School Scholarship.

SUMMARY TABLE OF CONTENTS

TABLE OF CONTENTS

I SCOPE

The thrust seaward in recent decades in the quest for the non-living resources at the bottom of the sea has been the subject of study by many scholars and other observers.[1] This thrust raises legal, political, economic, scientific and technical problems. Obviously, there is an interrelationship between and among these categories. Any attempt to separate or isolate one category must be done with the recognition that a successful isolation would defeat the very attempt to which it relates. Saying it another way: the examiner of one set of problems must keep in mind the synergies of the interface of all of them as well as the freeform changes constantly taking place in these several areas.

With that recognition in mind, it is the purpose of this study to examine the exploitation of minerals

[1]See, for example, E. Gullion (ed.), Uses of The Seas, 1-68 (1968); M. McDougal and W. Burke, The Public Order of the Oceans, 565-729 (1962); Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, Interim Report, I-XXIX (July 19, 1968).

on the Outer Continental Shelf from a lawyer's standpoint. Basic to this approach are the questions: (a) What is the factual frame of reference ? and (b) What is the law today? Subsidiary notions are: the binding force of the law, possible sanctions for violation, how particular decision-makers will react to certain factual situations, and trends, probable and alternative.

A. The Size of the Arena

The first inquiry is directed toward delimiting the thing that we call the Outer Continental Shelf. Diverse definitions appear in the law books. Under the Outer Continental Shelf Lands Act,[2] the shelf begins at the seaward limit of state jurisdiction. States were granted title to the seabed out to three miles from the coastline (three marine leagues for the Gulf of Mexico boundaries of Texas and Florida) by the Submerged Lands Act.[3] This much is relatively clear in the United States, even though litigation is still pending wherein there are jurisdictional boundary disputes between the United States and the

---

[2] 43 U.S.C. §1331.

[3] 43 U.S.C. §1301.

Atlantic and Gulf Coast states.[4] The outward extent of the shelf is complicated by several factors.

First, the Convention on the Continental Shelf, a treaty to which the United States is a party, defines the shelf, in terms of a depth contour line (isobath)[5] plus an "exploitability factor".

This definition states that the shelf includes "the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superadjacent waters admits of the exploitation of the natural resources of the said areas."[6] The same rule applies to the coasts of islands.[7]

Many people read many different things into this definition. Some say that, as the state of the

---

[4]United States v. State of Maine, No. 35 original (U.S. Supreme Court, filed June, 1969, 395 U.S. 955); hereinafter cited as "Atlantic Shelf Case").

[5]Convention on the Continental Shelf, Art. 1, adopted by the United Nations Conference on the Law of the Sea, April 29, 1958, 15 U.S.T. 471, T.I.A.S. 5578, 449 U.N.T.S. 311 (effective June 10, 1964, hereinafter cited as the "1958 Shelf Convention").

[6]Id.

[7]Id.

art advances, exploiters can carry their activities out further and further into the abyssal deeps, eventually reaching to or beyond the midline of the ocean.[8] Others feel that the words "adjacent to the coast" put some limit on the submarine perambulations.[9]

Added to such vague and shadowy notions are the disputes among sincere scientific inquirers and the lack of comprehensive geological knowledge.[10] The difficulties of the scientific community are given consideration by lawyers because the concept of a continental shelf was an effort, in the first instance, to explain certain phenomena observed in the physical world.[11] Beyond the "shelf", the geologists speak of the "shelf edge", the "borderland", the "continental slope", the "borderland slope", the "continental terrace", "the continental rise", and, finally the "abyssal plain".[12] The abyssal plain is, of course,

---

[8]National Petroleum Council, Petroleum Resources Under the Ocean Floor, 7-8 (1969); (hereinafter cited as "N.P.C. Report").

[9]1958 Shelf Convention, Art. 1.

[10]K. Emery, Geological Aspects of Sea-Floor Sovereignty, in the Law of the Sea (L. Alexander ed. 1967); F. Shepard, Submarine Geology (2 ed. 1963)

[11]Id.

[12]Id.

studded by islands, seamounts, ridges and plateaus, while being dented by deeps, trenches, canyons, and the like.[13]

These terms become irrelevant under the Shelf Convention. The difficulties of geological detection, measurement and classification, with their attendant semantic problems, are cast aside. Instead, we have a "continental shelf" which might be ten miles across or ten thousand miles across while the depth may be 200 meters or 2,000 meters.

Another dim dimension was recently superimposed on this already foggy vista: the so-called "moratorium resolution" passed by a two-thirds majority of the United Nations General Assembly on December 15, 1969.[14] The background and purpose of that singular effort would be the subject of a lengthy study in geopolitics and could surely fill several volumes. Briefly, it seems that many states fear that the technologically advanced nations will advance

---

[13] Id.

[14] A/C. I/L/ 480/Rev. 1 (December 15, 1969).

further and further out on the shelf, and beyond.

This means that a majority of the members of the United Nations (many grouped under the euphemisms of "underdeveloped", "developing", or "emerging") have decided to use their voting power to obstruct proposals favored by the major powers. A good deal of noise has ensued.

Numerous proposals have been made to appease the fears and demands of these countries.[15] Without detailing their differences and similarities, it can be said that all such proposals envision a new legal regime for the sea bed with payments of rents or royalties, or both, into a fund which would be apportioned according to some formula which would favor the "underdeveloped" nations of the world.

This, then, is the frame of reference for the December 15, 1969, moratorium resolution of the

---

[15] Our Nation and the Sea, A Plan for National Action, Report of the Commission on Marine Science, Engineering and Resources, 143-153 (1969), hereinafter cited as "COMSER Report"; Goldie, The Contents of Davy Jones's Locker-A Proposed Regime for the Sea Bed and Subsoil, 22 Rutgers L. Rev. 1 (1968).

General Assembly. Beyond the somewhat dreary little gropings that it reflects, the moratorium resolution contains unfortunate phraseology. The resolution calls for a halt in development of the Shelf beyond the limits of "national jurisdiction." In using this phrase it throws us right back to the Truman Proclamation of 1945,[16] which stated that:

> "...the United States regards the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control. ..." (Emphasis added).

Since it was the Truman Proclamation which began to establish the customary international law that was codified by the Shelf Convention,[17] it follows that the U. N. resolution's reference to national jurisdiction is the same kind of jurisdiction referred to in the Truman Proclamation. This being the case, a cogent

---

[16]Presidential Proclamation No. 2667, Sept. 28, 1945, 3 CFR. 1943-1948 Comp., 67: hereinafter cited as the "Truman Proclamation").

[17]Vol. 3, Panel Reports of the Commission on Marine Science, Engineering and Resources, Panel VIII, page VIII-13, esp. at n. 18; hereinafter cited as "Panel VIII Report"; North Sea Continental Shelf Cases (1969) I.C.J.3, at 32-33.

argument could be made that the resolution has little, if any, effect on the United States.

The term, "Outer Continental Shelf" or, simply, "shelf", is used herein with recognition that there has been no precise definition, and, further, that any attempt to achieve a precise definition at this time is merely an exercise in futility. A rather loose amalgam of the legal (treaty) definition and the geological notions of the continental terrace and the continental rise will be used, unless the context otherwise requires. This is probably a servicable usage because it is as broad as that advocated by all but the most extreme advocates of extending the shelf to some midline of the oceans. No suggestions of policy as to the desirability of a wide shelf versus a narrow shelf are here intended. The examination of legal problems simply would not be complete if we covered only part of the area about which substantial claims are being made.

Because the shelf is generally thought of in terms of a depth contour line, it is not ordinarily defined in terms of distance from the coast line. Indeed, such a definition would be false, ab initio, since lateral distance at the surface of the sea bears no relation at all to the extent, composition, gradient or depth of the seabed.

Traditionally, however, most of the people concerned with the ocean were those who used its surface: navies, merchant fleets, fishing fleets, explorers and yachtsmen. It was, of course, between, among and because of such groups that the law of the sea developed. Thus, the territorial sea is defined in terms of distance from shore (or a baseline), but includes sovereignty and ownership by the coastal state over the seabed and subsoil.[18] Similar assimilations of the seabed to the water column have led to fusion and confusion of legal doctrines. "Freedom of the Sea" is a cry heard in connection with continental shelf matters. But that grew up as a navigation rule, not, for example, as an oil-drilling rule.

---

[18]North Sea Continental Shelf Cases, (1969) I.C.J. 3.

Particular nations have made a variety of claims to territorial seas, ranging from the traditional three mile limit to the Latin American claims of up to 200 miles.[19] Obviously, a claim of territorial sovereignty includes a claim of exclusive competence in the coastal state with respect to the sea bed and subsoil.

B. The Contents of the Arena: The Types of Resources Involved

Petroleum and natural gas extraction from the ocean floor is, of course, already in the realm of very big business. Latest estimates put the annual volume at about five billion dollars.[20] Hard minerals are known to exist, some in great profusion.[21] Manganese nodules, for example, occur over vast areas of the deep ocean floor and to some

---

[19] 4 Whiteman, Digest of International Law, 14-35 (1965); (hereinafter cited as "Whiteman Digest"); N.P.C. Report, Appendix F.

[20] COMSER Report, 121-123.

[21] V. McKelvey and F. Wang, World Subsea Mineral Resources, Department of the Interior, U.S. Geological Survey, A Discussion to Accompany Miscellaneos Geologic Investigations Map 1-632, at 10-11 (1969); (hereinafter cited as "McKelvey and Wang").

extent on the shelf areas.[22] Only minimal amounts of these hard minerals have been taken up to the present and none are yet commercially exploitable, although efforts to develop them are being made.[23] Phosphorous nodules are in the same general category except that they occur with less frequency.[24] The real problem of nodule exploitation is not so much in the gathering. Suitable techniques for procuring the nodules already exist, although they are probably in their primitive stages and rapid strides in the relevant technology can be expected.[25] Economically sound methods of breaking down the nodules into their several component minerals (manganese, phosphorous, copper, nickel, tin, cobalt and others) are required. The separation techniques heretofore developed are too inefficient and, consequently, too expensive.[26]

At least one company is actively engaged in the

---

[22] _Id_.

[23] _Id_.

[24] _Id_.

[25] _Id_.

[26] _Id_.

nodule business. It is Deepsea Ventures, Inc., a subsidiary of Tenneco.[27] That company is operating a ship to gather the nodules and is building a pilot plant for processing them. It apparently has confidence that it has solved the processing problem for it is actively pursuing the project.[28]

It is estimated that twenty-three ships could gather enough nodules to supply 90% or more of the world's needs of nickel.[29] Add to this the fact that the nodules are apparently precipitating out of water at a rate faster than world consumption of nickel and one can see why there is tremendous potential in the nodule industry.[30] If cheap nickel (or other hard minerals) becomes available from nodules, land mines would find it impossible to compete. Thus, there will no doubt be opposition from the existing mining companies and related interests (labor, for one).

Besides the technical and economic reasons which

---

[27] Id., at 13.

[28] Id.

[29] Id.

[30] Id.

restrict exploitation on the shelf, there is another element which counsels businessmen to caution. It is a composite of financial and legal considerations which can, for convenience, be labelled "fear of instability" or "lack of security." A business corporation which explores for minerals and follows with an exploitation facility has made an enormous expenditure of shareholders' money before the first dollar of return comes in. The risk of never finding anything or, even if found, of not bringing in a profitable operation, entails a real gamble.[31] If that risk is coupled with uncertainty as to whether or not the exploiter will be allowed to keep the fruits of his endeavors, there is a powerful deterrent to exploration and exploitation.

C. The Actors in the Arena

It is easy to form a mental picture of giant oil rigs, operated by enormous corporations, penetrating the shelf areas of the world. News media and periodicals are laden with stories and photographs. The picture would not be complete without a conceptual vision of the siphoning off of

---

[31] NPC Report, Appendix E.

vast profits by some vaguely amorphous group of greedy capitalists. The faintly evil spectre of private profit is magnified by the stories of cavalier disregard for public welfare in the pollution of the sea by drilling operations or tankers. Even more sinister is the notion of a "depletion allowance", whereby the foolish politicians allow oil companies an income tax deduction for doing the very thing which produces their profits, namely, the production of oil and gas.

In addition to the corporate enterprises, there are groups of corporations, or cartels, engaged in continuing associations, as well as joint ventures for particular purposes.

But the public sector is also very active on the shelves of the world. Indeed, it was the public sector which in 1945 began the chain of events which established the shelf in legal contemplation (the Truman Proclamation).[32]

---

[32] R. Jennings, The Limits of Continental Shelf Jurisdiction: Some Possible Implications of the North Sea Case Judgment, 18 I.C.L.Q. 819 (1969); (hereinafter cited as "Jennings")

Under the Submerged Lands Act, states of the United States are given competence over the shelf out to the three mile limit (nine miles in the Gulf of Mexico for Texas and Florida).[33] This competence can, of course, be shared by the state with its local governmental units.

A vast array of agencies of the United States are concerned with shelf affairs. Congress and the judiciary, no less than the administrative agencies, have been effective in shaping the rules for the shelf. Within the executive branch, the list is long. The Department of the Interior and the Department of the Army probably are the agencies which have broadest effect on the shelf, although the State Department, the Department of Justice, the Treasury Department and the Coast Guard all have authority in certain respects.[35] Within some of the Departments on this list, there are numerous bureaus, agencies, commissions, services, boards, councils, committees, and the like, which have an impact on shelf affairs.

---

[33] 43 U.S.C. § 1301 (1953).

[34] COMSER Report, 228.

[35] Id.

On the international level, conferences, committees and other organs of, or sponsored by, the United Nations have shown interest in the Shelf. The Shelf Convention of 1958 is, of course, the landmark effort of the United Nations in this area. More recent attempts to plan and actuate an international regime beyond some yet-to-be-specified limit, have met with no success.[36] The Seabed Subcommittee has been active in recent years, as was the International Law Commission in the 1950s, and their discussions have attracted wide participation.

With its decisions in the Anglo-Norwegian Fisheries Case and the North Sea Continental Shelf Cases, the International Court of Justice has assumed status as a major force with respect to Shelf problems in the international arena.[37] Even though the I.C.J. does not acknowledge the rule of *stare decisis* it does look to prior cases for guidance.[38] Similarly, other

---

[36]Panel VIII Report, VIII-17 to VIII-32.

[37]North Sea Continental Shelf Cases. (1969) I.C.J. 3; Fisheries Case (United Kingdom v. Norway, (1951) I.C.J. 116.

[38]*Id.*

decision makers look at the I.C.J. opinions with respect.[39]

At the regional level, about the only arrangement with an appearance of a formal international agreement is that of the "CEP" countries (Chile, Ecuador and Peru). These three countries signed the "Declaration of Santiago on the Maritime Zone" in August, 1952. This Declaration of Santiago proclaimed a two hundred mile zone of "exclusive sovereignty and jurisdiction" adjacent to their respective coasts.[40]

Other than in the U.N. Moratorium Resolution referred to in Part IA, supra, there have been no discernable groupings of states for concerted action, either formal or informal, on the shelf.[41]

---

[39] Jennings, 820, 832.

[40] Whiteman Digest, 69.

[41] N.P.C. Report, Appendix F.

II THE INTERESTS OR NEEDS SOUGHT TO BE ADVANCED

A curious set of semantic gyrations on the nature of the coastal states' interest in the shelf began, appropriately enough, right at the beginning. The Truman Proclamation stated that the United States regarded the resources of the shelf "... as appertaining to the United States, subject to its jurisdiction and control."[42]

The operative words here are: "appertaining", "jurisdiction" and "control." Most writers have concentrated on the words "jurisdiction" and "control" and have concluded that they signified something less than full territorial sovereignty or ownership.[43] The

---

[42]Note 16, supra; for a general discussion of the entire problem, see Hearings Before the Special Subcommittee on Outer Continental Shelf of the Senate Committee on Interior and Insular Affairs, 91st Cong., 1st and 2nd Sess. (1969-70: hereinafter cited as "Senate Committee Hearings").

[43]United States v. Ray, 423F.2d16 (5 Cir., Jan. 22, 1970, opinion modified April 10 1970,; (hereinafter cited as "Ray Case").

dictionary definition of "appertain" is: "to belong or pertain, as appropriate, or as a possession, attribute, part, or right." Here we see notions of belonging, possession and right. Further, the first definition of "pertain" is: "to belong or be attached as a part or accessory, <u>to belong as a property</u>, function or proper concern..."[44] (emphasis added). In legal contemplation, the definitions are remarkably similar, including the concept of belonging. Black's Law Dictionary also refers the reader to the word "appurtenant," the first definition of which contains the "belonging to" language and, in one of the explanatory notes:

> "Land cannot be appurtenant to land.... except in the case of land under water...."[45]

Starting with the Truman Proclamation, then, it could be argued that the claim amounted to territorial annexation in the full sense of the phrase. This argument is buttressed by a number of other developments. On the same day as the Proclamation,

---

[44] <u>Webster's New International Dictionary of the English Language</u> (2d Ed. 1951).

[45] <u>Black's Law Dictionary</u> (4th Ed. 1951).

President Truman issued Executive Order no. 9633, the last sentence of which read:

> "....Neither this Order nor the aforesaid Proclamation shall be deemed to affect the determination by legislation or judicial decree of any issues between the United States and the several states, relating to the <u>ownership</u> or control of subsoil and sea bed of the continental shelf within or outside of the three-mile limit."[46] (emphasis added).

The Submerged Lands Act of May 22, 1953, granted to the states of the union what is generally regarded as "ownership" in the shelf out to the three mile limit of the U.S.[47] The Act so states, in terms clear enough for all but the most advanced legal theoreticians. In Section 3(a) it is stated that "...title to and ownership of the lands beneath navigable waters... is ...vested in and assigned to the respective states...."[48] Remembering, however, that whatever rights the United States had in the shelf came into being with the Truman Proclamation of 1945, we are struck immediately with the fact that that Proclamation made no delineation in terms of the

---

[46]3 CFR, 1943-48 Comp. 437

[47]<u>N.P.C. Report</u>, 55

[48]43 U.S.C. §1311

rights claimed being measured by any particular distance from shore. In fact, the press release of the U.S. State Department, issued on the same day to accompany and explain the Proclamation, made reference to the 100 fathom isobath as being "generally considered" the seaward limit of the claim.[49]

Whatever difficulties may be encountered with defining the outer boundary of the shelf, it seems clear that there is no magical change in the kind of rights claimed in the shelf at the limit of the U.S. territorial sea. Indeed, the United States Supreme Court has held that the grant of the Submerged Lands Act ("title and ownership", n. 48, supra) extends three marine leagues (nine miles) seaward in the Gulf of Mexico in the cases of Florida and Texas.[50] Since the United States could grant title and ownership to submerged lands, beyond the three mile limit, it might be argued that, (1) it had such title and ownership to grant, and (2) as to those submerged

---

[49] XIII Bulletin, Department of State, No. 327, at 484-485 (September 30, 1945).

[50] United States v. Florida, 363 U.S. 121 (1960).

lands which were not granted to the states, title and ownership were retained by the federal government.

In at least two controversies, the United States has claimed "trespass" when individuals sought to construct artificial islands on the shelf beyond the three mile limit.[51]

Paragraph 1 of Article 2 of the 1958 Shelf Convention provides that the coastal state exercises "sovereign rights" over the shelf for purposes of exploration and exploitation of its natural resources. Paragraph 2 of Article 2 goes on to say that such rights are "exclusive."

In United States v. Maine, No. 35 Original, filed 1969, currently pending in the Supreme Court of the United States, the Federal Government has

---

[51] Ray Case, supra, n.43; Letter from Edward Weinberg, Deputy Solicitor, U.S. Dept. of the Interior, to Brig. Gen. John A. B. Dillard, Corps of Engineers, U.S. Army, February 1, 1967 (re the Cortez Bank).

brought suit against thirteen Atlantic coastal states to determine the rights of the parties to the shelf under the Atlantic Ocean beyond three miles from the coast line. In a "Brief for the United States in Support of Motion for Judgment," dated "January, 1970," the Government's statement of the case begins (at page 7 of the Brief):

STATEMENT

> "This suit was brought to establish, as against the defendant States, the rights of the United States _in the lands_ and natural resources of _the bed of the_ Atlantic Ocean more than three geographical miles seaward from the coast line. The complaint alleges (pp. 4, 6-9) that prior to May 22, 1953, the United States had, as against the defendant States, _exclusive sovereign_ rights over the seabed and subsoil underlying the Atlantic Ocean, extending seaward from the ordinary low-water mark and from the outer limit of inland waters on the coast to the outer edge of the continental shelf, for the purpose of exploring the area and exploiting its natural resources; that in 1953, by the Submerged Lands Act, 67 Stat. 29, 43 U.S.C. 1301-1315, _Congress gave the defendant States ownership of the bed of the three-mile territorial sea within their boundaries; and that otherwise the situation in the Atlantic Ocean remains_ as it was .... [52] (emphasis added).

---

[52] _Atlantic Shelf Case_, _supra_, n. 7.

Section 3(a) of the Outer Continental Shelf Lands Act provides:

> "(a) It is hereby declared to be the policy of the United States that the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, <u>and power of disposition</u> as provided in this Act."[53] (emphasis added).

Remarkably similar to the language of the Truman Proclamation as Section 3(a) was, the phrase "power of disposition" was new. Whether or not it was intended to signify an additional claim by the United States beyond that of the Proclamation, or merely to flow from the Proclamation, the presence of these words in the statute indicates the thinking of the Congress back in 1953.

Claims of the Latin American countries to extensive territorial seas were founded on their interpretation of the Truman Proclamation.[54] Here

---

[53] 43 U.S.C. § 1332.

[54] <u>Whiteman Digest</u>, 49-52.

again, the confusion between the seabed and the water column becomes important.

With all the foregoing claims in mind, it seems that it makes little difference whether the coastal states' interest in the shelf is characterized as territory, sovereign rights, ownership, exclusive rights, jurisdiction, control, title, or some euphonious designation such as "something less than fee simple."[55] It is also abundantly clear that the United States Government takes a broad view of its rights on the shelf and has been a zealous protector of these rights for the past twenty-five years.[56]

It needs but little reflection to realize that the coastal state has a paramount interest in the submerged part of its continent.

The basic right of self defense requires that

---

[55] Ray Case, supra, n.43.

[56] Id.

a coastal nation cannot allow potential enemies to make emplacements near its shore. The same thinking would provide the rationale for keeping a close watch over mobile activities on the shelf. Even scientific research can provide knowledge of resources or subsea topography which could be useful to a hostile power.

While different legal regimes may appropriately be applied to the seabed and the water column, it is clear that the uses of the two are intertwined, if not interdependent in certain respects. For example, navigation uses, particularly commerce and fishing, are critically important to the coastal state. It follows that the coastal state has a legitimate interest in protection and accomodation of potentially conflicting uses. Hence, the "safety fairways" established by the United States in the Gulf of Mexico. These are areas (designated on official charts) leading to ports wherein it is forbidden to build structures such as oil rigs.[57] The purpose, of course, is to avert collisions between ships and

---

[57]Chevron Oil Company v. M/V New Yorker, 297 F. Supp. 412 (D.C. E.D. La., 1969).

oil rigs. Similarly, "security zones" around fixed emplacements protect both shipping and shelf interests.[58]

With rapid strides in biological science being translated into technical competence, the business of sea-farming, or aquaculture, looms as a distinct probability for shelf development. This activity will no doubt include certain types of vegetable production as well as free swimming fish. At least one state, Florida, has enacted a comprehensive statute on the subject.[59] Regulations for leasing the use of the sea bottom and water column have been promulgated by that state,[60] and one lease has been approved at the administrative level.[61]

While it is not the purpose of this study to

---

[58] 1958 Shelf Convention, Art. 5.

[59] Chap. 253 F.S. § 253.67-253.75.

[60] Minutes of the State of Florida Board of Trustees of the Internal Improvement Fund, Aug. 26, 1969.

[61] Minutes of the State of Florida Board of Trustees of the Internal Improvement Fund, Feb. 3, 1970.

examine the multitudinous problems of environmental protection, or pollution control, the events of recent years, particularly some of the huge oil spills, point up the need for regulation and enforcement to (a) avert further disasters, and (b) provide a legal mechanism for allocation of clean up costs and responsibilities. The Federal Government has recently enacted new and widely inclusive legislation on this point.[62] States and local governmental units are increasingly aware of their responsibilities and extensive legislative and enforcement activity can, therefore, be expected at state and local levels.[63]

Another aspect of mineral operations on the shelf is the need for some sort of minimum public order. The savage melees of the "wild west," with attendant doctrines of self help, provide us with soporofic television melodramas but are clearly not appropriate to exploitation of mineral resources in a civilized society. This need goes beyond the

---

[62] Water Quality Improvement Act of 1970, ___U.S.C.___, H. R. Rep. No. 91-940, 91st Cong., 2nd Sess.

[63] For example, a count reveals that 49 bills relating to environmental and ecological matters were introduced in the Florida Senate on one day, April 7, 1970 (Legislative Summary, published by Florida Legislative Reporters, Inc., Tallahassee, Florida 32302, April 8, 1970).

necessity for orderly allocation of seabed areas to those interested in exploration and exploitation. The economic realities require that shelf producers operate from bases on shore and refine their recoveries at shore facilities.[64] Public order also demands that there be a forum where private parties can litigate their controversies. Personal injury, property damage, claim jumping, and breach of contract (including leases and subleases), all require a place where redress can be had. Sound conservation of mineral resources calls for formulation and application of appropriate standards by a body of competent jurisdiction.[65]

Unfortunately, business organizations have at times exhibited tendencies to engage in unwholesome business practices, ranging from cutthroat competition through monopolistic arrangements and price fixing.

---

[64] N.P.C. Report, Ch. 8; but see, World Oil, Oct., 1969, wherein new offshore underwater oil storage tanks are described which could at some point in the future make drilling platforms independent of the neighboring state.

[65] N.P.C. Report, Ch. 9c.

The need for trade regulation laws would seem no different on submerged land than on dry land.

Theorists have discussed ownership of the seabed and subsoil (or lack of such ownership) in terms of *res communis* and *res nullius*.[66] These arguments go on *ad infinitum*, and, it is here submitted, *ad nauseam*.[67] About as profitable would be theories on ownership or other competence regarding the surface and subsoil of Uranus or undiscovered planets in the star system of Vega. Indeed, some writers have approached this zenith.[68] Until something is done to reduce the object to some form of utilization, the theories remain idle. With regard to the continental shelf, wherever its outer limit may be fixed, it is clear that it is subject to the national jurisdiction of the coastal state.[69] Thus,

---

[66] *Panel VIII Report*, VIII-20.

[67] *Id*.

[68] *M. McDougal, H. Lasswell, I. Vlasic, Law and Public Order in Space (1963)*.

[69] *1958 Shelf Convention*, Arts. 1, 2.

the inclusive uses to be accommodated relate to those associated with the use of the water itself.

The High Seas Convention lists four categories of "freedom of the seas," namely:

(a) navigation;
(b) fisheries;
(c) research;
(d) cables and pipelines.[70]

Since the shelf extends further from the coast, in many areas, than the limits of the territorial sea, it becomes necessary to coordinate and harmonize the listed inclusive uses with the exclusive claims of the mineral exploiters. Examples would be the interference with fish and their food supplies caused by drilling or dredging, the fouling of ships by oil spills, and the navigational hazards caused by structures.[71]

---

[70]Convention on the High Seas, Art. 2, adopted by the United Nations Conference on the Law of the Sea, April 29, 1958, 13 U.S.T. 2312, T.I.A.S. 5200 (in force 1962; hereinafter cited as "1958 High Seas Convention").

[71]<u>N.P.C. Report</u>, 80.

III THE SITUATION OF THE SHELF

The basic crust of the earth, on a world-wide basis, is a layer of basaltic rock ("black rock").[72]

This basaltic layer, regardless of water coverage, overlays the mantle.[73] On about one-third of the earth's surface, large masses of granitic rock ("white rock") overlay the basaltic layer.[74] These are, of course, the continents. This granitic rock is of less density than the basaltic layer. Thus, the continents tend (a) to stand up prominently above the general crust level, and (b) to extend downward deep into the mantle material, always underlain by the basaltic layer.[75]

Vertically, then, the continental crust is much thicker than the crust over the deep ocean floor. Several writers have likened the continents to icebergs in the sea (the basaltic layer being the "sea" in this

---

[72] Mc Kelvey and Wang, 5; N.P.C. Report, 66.

[73] *Id.*

[74] *Id.*

[75] *Id.*

simile). Laterally, again like an iceberg, the edge of the continental mass is covered by water. Mc Kelvey and Wang put it this way:

> ... The ocean basins, of course, are filled with sea water--more than filled, in fact, for the ocean extends over the margins of the continental masses for distances ranging from a few to more than 1,300 km. The boundary between the continental masses and the ocean basins thus lies beneath the sea, generally at depths ranging from 2,000 to 4,000 meters.[76]

The igneous (heat formed or extruded) rocks and metamorphic (heat and pressure formed) rocks of the continents are relatively rich in silica and the alkalis--hence the nickname "white rock'--when compared to the oceanic crust of basalt and related rock.[77] This is important because weathering and other erosional processes have created thick layers of sedimentary rock from the material of the continents.[78] These thick layers of sediment were deposited in ancient seas spreading over the continents and in oceanic basins near the continents.[79] It is in these thick, sedimentary

---

[76] Id.

[77] Mc Kelvey and Wang, 5.

[78] Id.

[79] Id.

rocks that deposits of oil, gas, sulphur, saline minerals and coal occur.[80] By contrast, the deep ocean basins are overlain with only a thin layer of sediment, except near the continents where erosional debris has been carried from the land.[81]

Putting it another way, the continental shelf is clearly a part of the land mass, even though covered by water, and is different in kind from the true seabed or oceanic crust. Furthermore, the word "shelf" is really a misnomer, created and put into general use at a time when little was understood about the real composition of the earth's crust and, more important, about the essential differences between the continental masses and the deep ocean floor.

While, as pointed out above, the submerged portions of the continents range from a few to more than 1,300 km. in distance from shore, the salient fact is that these areas comprise 20.6 percent of the subsea topography of the earth.[82] In addition, there are the special cases

---

[80]Id.

[81]Id., 6.

[82]Id., 7.

of semi-enclosed seas or basins. The North Sea, Black Sea, Hudson Bay, Okhotsk Sea, Java Sea, Andaman Sea, South China Sea, Sulu Sea, Celebes Sea, Banda Sea, Japan Sea, Gulf of Mexico, Caribbean, Mediterranean and the southwest part of the Bering Sea all fall into this category.[83] Some of these are shallow and some are deep, but in each case they contain extraordinary amounts of sediment.[84] Encompassing only about one percent of the area of the main deep ocean basins, they contain about seventeen percent of the total volume of oceanic sediments.[85]

While there have been no comprehensive estimates of total world subsea petroleum resources, Mc Kelvey and Wang state: " ... enough is known to be certain that they are large, perhaps even larger than those of the continents.... "[86] Proved recoverable reserves are ninety billion barrels.[87] One scientist estimates petroleum reserves or resources out to a water depth

---

[83] N.P.C. Report, 83.

[84] H. Menard and S. Smith, Hypsometry of Ocean Basin Provinces, 71 Jour. Geophys. Research, 4305-4325 (1966); H. Menard, Marine Geology of the Pacific (1964).

[85] Id.

[86] Mc Kelvey and Wang, 8.

[87] Id.

of one thousand feet (three hundred meters) to be:

(a) seven hundred billion barrels of petroleum liquids; plus

(b) three hundred fifty billion barrels recoverable by secondary methods; plus

(c) the equivalent of three hundred fifty billion barrels of natural gas.[88]

Exploration for petroleum is underway offshore of seventy-five nations; drilling is in progress off the coast of forty-two of them; and production is taking place offshore of twenty-five countries.[89] This production accounted for seventeen percent of world production in 1969 and nearly ninety percent of all subsea mineral production.[90]

Other minerals currently being produced on the continental shelf include:

(a) those dredged up in shallow water near

---

[88] L. Weeks, <u>Offshore Petroleum Developments and Resources</u>, 1969 <u>Jour. Petroleum Technology</u>, 377-385.

[89] <u>McKelvey and Wang</u>, 8.

[90] <u>Id</u>.

shore: heavy mineral concentrates (placers), sand, gravel, shell and lime mud;

(b) those mined underground from a land entry: coal, iron, copper and limestone;

(c) those mined through drill holes; sulphur and salt.[91]

The Stratton Commission summed up the state of ocean mining in this way:

> The marine mining industry is in its infancy. Exclusive of oil and gas, the total 1967 value of offshore world mineral production was estimated at nearly $1 billion, of which about 20 percen-t came from United States waters. However, about 35 percent of the world total was accounted for by coal recovered through tunnels from shore, and about 40 percent was chemicals recovered from the sea water column. Worldwide, less than $200 million worth of mineral products was mined directly from the ocean floor annually. If common sand, gravel, oyster shells and sulphur are excluded, this figure reduces to $50 million, which is the present annual world value of tin, iron, heavy minerals and diamond production from offshore sources.[92]

---

[91] *Id.*

[92] *COMSER Report*, 132.

IV CLAIMS AND CLAIMANTS

A. Access and Competence

The 1958 Convention on the Continental Shelf makes it clear that the coastal state has exclusive sovereign rights over the shelf for the purpose of exploring it and exploiting its natural resources.[93] Paragraph 3 of Article 2 states:

> The rights of the coastal state over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.

Articles 3, 4 and 5 preserve the status of the superadjacent waters as high seas, with attendant freedom to navigate and to lay and maintain cables and pipelines, subject to the right of the coastal state to establish reasonable safety zones around exploration and exploitation installations, and to approve Continental Shelf research by foreign nationals.[94]

These provisions form an important part

---

[93] 1958 Convention.

[94] Id.

of the background for the tug-of-war situation wherein some interests favor a narrow legal shelf and others opt for a wide shelf. As will be seen, there are reasons which seem to pull both ways even within the same interest blocs. Further, some of the interests which might logically be expected to be on one side are found to be exerting strenuous efforts in the other direction. For example, one could expect that nations with a very narrow geological shelf would push for a narrow legal shelf on the basis that worldwide geological shelf resources beyond the legal shelf would be available to all, with or without some international regime or agency to regulate operations and distribute largess therefrom. The very opposite has taken place with respect to the Latin American countries on the West coast of South America. There, the geological shelf is very narrow but several nations have claimed a two hundred mile territorial sea.[95] Since the territorial sea carries with it exclusive rights to the seabed and subsoil, these are

---

[95] Whiteman Digest, 14-35; Marine Science Affairs--A Year of Broadened Participation, the Third Report of the President to the Congress on Marine Sciences and Engineering Development (January, 1969; hereinafter cited as "Third Report of the President").

"shelf claims" for areas of up to one hundred ninety miles beyond the edge of the continental land mass. Notions of national pride naturally play a part in such claims. Nations with little or no geological shelf seem to feel a need to compensate for a possible taint of inferiority by making exaggerated claims. The real interests sought to be advanced are subject to speculation. In some cases, they may well have nothing to do with mineral resources. This could be the case of countries near the Humboldt Current in the Pacific Ocean off the West coast of South America. There, one might suspect that the real economic interest is in the prolific fisheries at the confluence of warm and cold waters (with attendant rich feeding and breeding grounds).

An observer coming on the scene without specific knowledge might think that underdeveloped coastal countries as a group would find it in their interests to favor a wide legal shelf so that they would receive, directly, appropriate fees and royalties from any mineral extraction activities and be in a position to control positively the balance between conservation and development of resources. The complexities of international politics do not admit of any such simple conclusions, however, and the voting on the so-called "Moratorium Resolution" of December 15, 1969, demonstrates that point.[96]

Private interests, such as the United States oil industry, have an understandable reason for favoring a wide legal shelf. Development of offshore petroleum deposits requires immense effort and truly gigantic amounts of capital investment. Offshore of Louisiana alone, during the period 1951-1965, exploration costs of $1,600,000,000 and development costs of $4,700,000,000 added to a total investment of $6,300,000,000.[97] In projecting costs, it must be remembered that the Louisiana offshore wells were drilled in warm water and shallow depths (mostly less than one hundred feet).[98] In cold areas (e.g., Alaska) the cost of an oil platform in one hundred feet of water is seven or eight times

---

[96]Moratorium Resolution, Dec. 15, 1969, A/C. 1/L. 480/Rev. 1.

[97]<u>N.P.C. Report</u>, 50.

[98]<u>Id</u>., 50-51.

what it is in the Gulf of Mexico.[99] The cost of an eight-inch pipeline in Alaska is six times that of one in the Gulf of Mexico.[100] Even without differences in climate, the cost of petroleum exploration and production rises rapidly as the depth of the water increases.[101]

Such cost factors, coupled with the inherent risk of spending large sums in exploration without bringing in economically feasible production fields, mean that investors will strive for security in their rights to the productive fields that they do develop. A wide legal shelf, where the coastal nation landlord stands behind its leases, gives them that security.

By encouraging investment and development, these private interests reason, a large legal shelf will promote the widest and most efficient use of available technology to provide petroleum energy in an energy-hungry world.

---

[99] _Id._, 51.

[100] _Id._

[101] _Id._, Appendix E.

Interestingly enough, the two major power bloc leaders, the United States and the U.S.S.R., found themselves on the same side in opposing the "Moratorium Resolution."[102] This is not to say that their positions will ultimately be identical on the question of a wide vs. narrow legal shelf, but rather that, at this point in time, no struggle has developed.

B. Particular Claims and Controversies.

(1) Personal injury and property damage.

What law governs the claim of a worker who is injured or killed on an oil rig on the continental shelf beyond the boundaries of any state? Various theories have been advanced. Is it general maritime law? Does the Federal Death on the High Seas Act provide an exclusive remedy when the injury results in death?[103] Does the "saving to suitors" clause preserve a remedy under state law?[104] Can the Outer Continental Shelf Lands Act be construed as incorporating a state wrongful death statute into Federal law even though there is a

---

[102]Moratorium Resolution, Dec. 15, 1969, A/C. 1/L. 480/Rev.1.

[103]46 U.S.C. § 761, _et_. _seq_.

[104]28 U.S.C. § 1333.

Federal law governing wrongful death more than three miles from shore? Will it make a difference that the injury does not result in death? Or that the worker fell into the sea? Or that he was injured on a vessel operated in connection with the platform (e.g., a tender)?

These and related questions have been the subject of a fascinating series of cases in recent years.

In Freeman v. Aetna Casualty and Surety Company[105], the plaintiff sued under the Jones Act[106] and general maritime law for injuries suffered while he was employed as a derrick man on a fixed drilling platform located eight to ten miles off the coast of Louisiana. The accident occurred on the platform and was caused by the falling of a drill nipple which was part of the platform equipment. The drilling tender "S-24" (about which more later) was present to provide eating, sleeping and sanitary facilities for the personnel of the drilling platform. One witness stated that plaintiff had no duties aboard the tender, but plaintiff stated that "he occasionally would be required to mix drilling

---

[105] 398 F.2d 808 (5 Cir. 1968).

[106] 46 U.S.C. § 688, et. seq.

mud on board the tender"[107]. In its instructions to the jury, the trial court included in its definition of a vessel the words "in navigation."[108]

The jury verdict was adverse to the plaintiff and the Fifth Circuit Court of Appeals affirmed, holding that the platform was not a "vessel," that plaintiff was not a "seaman" and, thus, was not entitled to a warranty of seaworthiness as to platform and equipment.[109] The Court stated, _inter alia_,

> Moreover, it is undisputed that the platform in this case itself could not be considered a "vessel" within the meaning of applicable law. The only vessel on which Freeman could possibly have been a "seaman" was the S-24, and it is sufficient to say that at the time of his injury he was not aboard that vessel, nor was he performing any duty which might be considered a duty of a member of the crew of that vessel, nor was he performing the traditional work of a seaman.[110]

The Court stated that its decision was controlled by _Dronet v. Reading and Bates Offshore_

---

[107] 398 F2d at 809.

[108] _Id._

[109] _Id._

[110] _Id._

Drilling Company.[111] In Dronet, the Court held that the injured platform worker could not recover, stating:

> It is apparent that appellant was injured on a stationary drilling platform in the Gulf, which platform was in no sense a vessel and appellant, therefore, was not a seaman nor was he entitled to the warranty of seaworthiness as to the drilling platform and equipment. See Offshore Company v. Robison, 5 Cir., 1959, 266 F.2d 769, 75 A.L.R.2d 1926.[112]

Nowhere in the opinion was there any mention of tenders. The cryptic reference to the Robison case was the Court's method of relying on obiter dicta contained therein. In Robison, recovery was allowed for an oil field worker or roustabout, injured while working on a mobile drilling platform in the Gulf of Mexico. That platform was floated into place by tugs where eight huge legs or caissons, twelve feet in diameter, were dropped to the ocean floor, after which hydraulic jacks lifted the structure above the water level so it could be used as a drilling platform. The court based its holding that Robison was a seaman squarely on the fact that the drilling platform (Offshore

---

[111] 367 F.2d 150 (5 Cir. 1966).

[112] Id. at 151

No. 55) on which he worked could float, saying:

> Offshore No. 55 is not a man-made island ... Offshore No. 55 was a special purpose vessel, a floating drilling platform. Robison's duties aboard that vessel contributed to her mission, to the operating function she was designed to perform as a sea-going drilling platform ... [113]

The Court established the following test for a case sufficient to go to the jury:

> ... there is an evidentiary basis for a Jones Act case to go to the jury: (1) if there is evidence that the injured worker was assigned permanently to a vessel (including special purpose structures not usually employed as a means of transport but designed to float on water) or performed a substantial part of his work on the vessel; and (2) if the capacity in which he was employed or the duties which he performed contributed to the function of the vessel or to the accomplishment of its mission ... [114]

Thus, the holding in Robison was that the roustabout could recover on a theory that he was a seaman under the particular factual situation there encountered. The reference to man-made islands was really gratuitous. Nevertheless, the quoted statements have been used as the basis for the decision in Dronet,

---

[113] 266 F.2d 769, 779 (5 Cir. 1959).

[114] Id.

and through it, of Freeman.

In neither Freeman, Dronet nor Robison, did the Court cite the line of cases which were developing to allow recovery for the injured platform worker, not because he was a seaman, but because Federal maritime law applied to torts occurring on such offshore drilling platforms, even though they were stationary.[115]

In Snipes, the Court concluded that a fall into the water from a drilling platform was (a) governed by Federal, not state, law under the Outer Continental Shelf Lands Act,[116] and (b) " ... that the Federal law thereby promulgated would be the pervasive maritime law of the United States ... "[117] The Court also stated:

> The severe permanent disabling injuries are therefore traced directly to the fall into the water. There can be nothing more maritime than the sea. (emphasis added.)[118]

---

[115]Loffland Brothers Company v. Roberts, 386 F.2d 540 (5 Cir. 1967), cert. den. 389 U.S. 1040 (1968); Ocean Drilling & Exploration Co. v. Berry Bros. Oilfield Service, 377 F.2d 511 (5 Cir. 1967); Pure Oil Co. v. Snipes, 293 F.2d 60 (5 Cir. 1961).

[116]43 U.S.C. § 1331 et. seq.

[117]293 F.2d at 64

[118]Id.

The question of whether Federal or state law applied was of paramount importance in Snipes since his action was not brought within the one year period of limitations imposed by Louisiana statute; but he could (and did) urge that the equitable doctrine of laches would not defeat his admiralty suit because the defendant was not prejudiced by the delay.[119]

The Ocean Drilling decision[120] applied Federal law to deny an action for indemnity by a tortfeasor against the employer of the injured platform workers. The court distinguished away Ryan Stevedoring Co. v. Pan-Atlantic S. S. Corp.[121] on the basis that it was unwilling to extend the Ryan shipowner-stevedore rule to a platform which was not a vessel and the employees of which were not seamen (citing Robison, Dronet and related cases).[122] In Ryan, the shipowner was allowed

[119] Id., at 62.

[120] 377 F.2d 511.

[121] 350 U.S. 124 (1956).

[122] 377 F.2d at 513.

indemnity against the stevedoring contractor who caused the unseaworthy condition for which the shipowner was liable in damages to its employee-seamen.

Loffland[123] involved a driller who was injured solely on the platform and who was ten percent contributorily negligent. Under state law, he would have been denied recovery because of his contributory negligence, while Federal maritime law included the doctrine of comparative negligence, allowing him a ninety percent recovery. The defendant argued the traditional doctrine that location of the tort determined whether or not maritime law applied. It sought to distinguish Snipes on the ground that there the plaintiff fell into the sea and that here the accident took place entirely on an artificial island. The Court stated:

> ... In Snipes, the Court noted that the historical tests for determining whether a tort was within the admiralty jurisdiction of the federal courts were not applicable in cases involving torts occurring on offshore drilling platforms since Congress had directed in the Outer Continental Shelf Lands Act that maritime law be applied. (citations omitted) Thus, it is clear that the decisions of this Court require the application of maritime law to this case. We can find no

[123] 386 F.2d 540.

valid reasons to depart from the rationale and holdings of those decisions and we decline to do so.[124]

From the foregoing cases it seemed reasonably clear that:

(a) if the rig could be floated and moved by tug, it was a vessel and a worker was a seaman so as to be entitled to recovery under the Jones Act;

(b) if the rig was stationary, no recovery could be had under the Jones Act, but if the plaintiff were clever enough to proceed on a theory of maritime tort, he could prevail;

(c) in any event, Federal law applied outside the three-mile limit to the exclusion of state law.

These cases merely set the stage, however, for the United States Supreme Court to display its agility and innovative talents. In a landmark decision,[125] the Supreme Court dealt with two separate decisions which

---

[124] *Id.* at 545.

[125] Rodrigue v. Aetna Casualty and Surety Company, 395 U.S. 352 (1969).

arose through the Fifth Circuit and which were consolidated on appeal.[126] The Dore case was decided first at the appelate level and the opinion there contained an exhaustive review of facts, precedent, statutes, legislative history and what that court deemed to be prevailing law. Dore was a wrongful death action by the widow and minor children of a worker who was involved in an accident when a crane he was operating collapsed and " ... fell to the barge or vessel below, which was being unloaded, and the decedent was killed when he fell on the barge."[127] The plaintiffs alleged negligence under the general maritime law, the Death on the High Seas Act[128] and the statutes of Louisiana.[129] The trial court limited the claim to one in admiralty for pecuniary loss under the Death on the High Seas Act.[130] The pivital issue in the case arose because the claim under state law could include damages for:

---

[126]Dore v. Link Belt Company, 391 F.2d 671 (5 Cir. 1968); Rodrique v. Aetna Casualty and Surety Company, 395 F.2d 216 (5 Cir. 1968).

[127]391 F.2d at 673.

[128]46 U.S.C. §761, et seq.

[129]Revised Civil Code of Louisiana, Article 2315.

[130]391 F.2d at 671.

> ... loss of love and affection, loss of support and inheritance, loss of material aid and services, loss of parental guidance, loss of society and companionship, pain and suffering, anguish and shock.[131]

The plaintiffs' claims were founded on two federal statutes. First, the "saving to suitors" clause of 28 U.S.C. § 1333, which provides in pertinent part:

> The District Courts shall have original jurisdiction, exclusive of the Courts of the States of: (1) Any civil case of admiralty or maritime jurisdiction, <u>saving to suitors in all cases all other remedies to which they are otherwise entitled</u>. (emphasis added).

The second statutory provision relied upon by plaintiffs was a portion of the Outer Continental Shelf Lands Act (43 U.S.C. § 1333 (a)(2)) which reads:

> (2) To the extent that they are applicable and not inconsistent with this subchapter or with other Federal laws and regulations of the Secretary (Interior) now in effect or hereafter adopted, the civil and criminal laws of each adjacent state as of August 7, 1953, are declared to be the law of the United States for that portion of the subsoil and seabed of the outer Continental Shelf, and artificial islands and fixed structures erected thereon, which would be within the area of the State if its boundaries were extended seaward to the outer margin of the outer Continental Shelf, and the President shall determine and publish in the Federal Register such projected lines extending seaeard and defining such area. All of such applicable laws shall be administered and enforced by the appropriate officers and courts of the United States .... (parenthetical matter added).

---

[131] *Id.*, at 673.

The Court of Appeals pointed out that Louisiana law must not be "inconsistent" with Federal law under the above-quoted provision, if it is to apply. But the Court found several inconsistencies to exist, namely, (a) state law allows for broad remedies, such as loss of love and affection, etc., provides a one-year limitation period within which actions must be brought, and bars recovery in the event of contibutory negligence, whereas (b) the Death on the High Seas Act limits recovery to pecuniary loss, has a two-year limitation period, and mere diminution of damages for contributory negligence under the comparative negligence doctrine.[132] This Court relied on its holdings in Snipes, Ocean Drilling and Loffland,[133] to reaffirm that this accident, occurring fifty miles out in the Gulf, was on the high seas and governed by Federal maritime law to the exclusion of state law.

The Court rejected the proposition that the plaintiffs were benefited by the "saving to suitors" clause, above quoted, saying inter alia,

---

[132] Id., at 674.

[133] Supra, note 115.

... We know of no theory in law under which a site more than fifty miles from the shore of Louisiana can be considered as part of the State. The conclusion is clear that there is no remedy to save under 28 U.S.C. §1333....[134]

The Appeals Court had a little more difficulty with the problem of casting aside state wrongful death acts on the basis of pre-emption by Federal law. The Court put the problem this way:

No right or remedy existed for the death on the high seas of a non-seaman maritime worker prior to the enactment of the Death on the High Seas Act. The maritime law provided no cause of action for wrongful death. The Harrisburg, 119 U.S. 199, 7 S. Ct. 140, 30 L. Ed. 358 (1886). Where Congress had remained silent, state death statutes were recognized and enforced by admiralty courts in claims arising from torts on the high seas. The Hamilton. 207 U.S. 398, 28 S. Ct. 133, 52 L. Ed. 264 (1907). With the passage of the Death on the High Seas Act, it is pertinent to inquire whether state statutes allowing for recovery for wrongful death are pre-empted by the Act. The issue is a novel one for this Court and the United States Supreme Court has made no pronouncement in this regard.[135] (citations by the Court).

The Court cited several district court decisions on both sides of the question.[136] Distinguishing cases where the tort occurred within a state's territorial

---

[134] 391 F.2d at 675.

[135] Id.

[136] Id., at 676.

waters, the Court held that the Death on the High Seas Act provided the exclusive remedy in this case.[137]

A little less than two months after Dore, Rodrigue was decided in the Fifth Circuit by a panel which included two of the three judges who were on the Dore panel.[138] In a brief per curiam opinion, the Court again held that no action would lie under the Louisiana Death Statute for death on a stationary drilling rig in the Gulf of Mexico beyond the three-mile limit. The Court cited in support of this ruling, Dore, Loffland, Ocean Drilling and Snipes.[139] The only reason for singling out Rodrigue herein is that there was no vessel or barge involved in any way. The injury took place entirely on the platform itself.

In a unanimous opinion, the United States Supreme Court reversed both Dore and Rodrigue.[140] The High Court agreed and re-emphasized that Federal law was supreme and

---

[137] Id., at 677.

[138] Supra, note 126.

[139] 395 F.2d at 217.

[140] 395 U.S. 352(1969).

exclusive in the Outer Continental Shelf area. Further, the Court recognized that state law could be applied as federal law under the Outer Continental Shelf Lands Act only if no inconsistent federal law applied.[141] Here, then, was the heart of the matter. Did the federal maritime law (including the Death on the High Seas Act) apply to these stationary drilling platforms? If not, then there is truly a void which may properly be filled by state law under the provisions of the Outer Continental Shelf Lands Act.[142]

The Court noted that the Death on the High Seas Act covers only deaths "occurring on the high seas,"[143] and these cases involve events on "artificial islands."[144] The Court explained its reasoning as follows:

> ... Admiralty jurisdiction has not been construed to extend to accidents on piers, jetties, bridges, or even ramps or railways running into the sea. To the extent that it has been applied to fixed structures completely surrounded by water, this has usually involved collision with a ship and has been explained by the use of the structure solely or principally as a navigational aid....

---

[141] Id., at 358.

[142] Id., at 359.

[143] Id.

[144] Id.

> The accidents in question here involved no collision with a vessel, and the structures were not navigational aids. They were islands, albeit artificial ones, and the accidents had no more connection with the ordinary stuff of admiralty than do accidents on piers.... In these circumstances the (Death on the High) Seas Act--which provides an action in admiralty--clearly would not apply under conventional admiralty principles and, since the (Outer Continental Shelf) Lands Act provides an alternative federal remedy through adopted state law, there is no reason to assume that Congress intended to extend those principles to create an admiralty remedy here....[145] (emphasis and parenthetical matter added).

The Court went on to buttress its conclusion with an exhaustive review of the legislative history of the Outer Continental Shelf Lands Act, stating at 395 U.S. 361,

> Even if the admiralty law would have applied to the deaths occurring in these cases under traditional principles, the legislative history shows that Congress did not intend that result. First, Congress assumed that the admiralty law would not apply unless Congress made it apply, and then Congress decided not to make it apply. The legislative history of the Lands Act makes it clear that these structures were to be treated as islands or as federal enclaves within a landlocked State, not as vessels.

and again at 395 U.S. 365, 366,

> ... it is apparent that the Congress decided that these artificial islands, though surrounded by the high seas, were not themselves to be

---

[145] Id., at 360, 361.

> considered within maritime jurisdiction. Thus the admiralty action under the (Death on the High) Seas Act no more applies to these accidents actually occurring on the islands than it would to accidents occurring in a federal enclave or on a natural island to which admiralty jurisdiction had not been sepcifically extended.... (parenthetical matter added).

Since the federal maritime law did not apply, there could be no inconsistency with state law and no obstacle to the application of state law as federal law, federally enforced. There the matter should end, an observer might think: maritime law does not apply to accidents on islands even though the deceased fell onto a ship. But such an observer must still reckon with the inhabitants of our old friend, tender "S-24."[146] Only three and one-half months after the Supreme Court ruling in Rodrigue, the Fifth Circuit announced its decision in Kimble v. Noble Drilling Corporation.[147]

Mr. Kimble was injured twice. At the time of his first injury, he was working as a driller, in charge of

---

[146] Freeman v. Aetna Casualty and Surety Company, 398 F. 2d 808 (5Cir. 1968).

[147] 416 F.2d 847 (5 Cir. 1969).

one of the four-man crews that worked on the platform. The Court recognized that he did most of his work on the platform but found that he had some duties on the tender, particularly for making sure that the drilling mud was mixed properly. Also, he ate and slept aboard. At the time of his second injury, Mr. Kimble was a member of a floor crew rather than a driller, consequently having reduced responsibilities with respect to the mud operation. The Court went back to Robison[148] for the proposition that it is correct to submit to the jury the question as to whether the injured worker is a seaman under the Jones Act, so long as he meets the test therein announced.[149] Freeman[150] did not help the defendants, the Court said, because there the Court " ... did exactly what appellants (defendants) ask us not to permit here: It submitted the question to the jury and it was the jury which denied the plaintiff status as a seaman."[151]

---

[148]266 F.2d 769.

[149]Id., at 779.

[150]398 F.2d 808.

[151]416 F.2d at 850.

But, argued the defendants, the Jones Act is federal maritime law and federal maritime law does not apply to these stationary drilling platforms. The Supreme Court so held in Rodrigue, they insisted, and it is to Louisiana law that we must look under that doctrine. Not so, held the Fifth Circuit, if a man is a seaman in the service of his ship, the Jones Act and the general maritime law apply of their own force, and they would still apply even if Mr. Kimble received his injuries in the heart of the Louisiana mainland (so long as he was acting as a seaman in the service of his ship).

What the Supreme Court might do with this set of facts is not free from doubt. If it is true that "there can be nothing more maritime than the sea,"[152] would not it also be fair to say, "there is only one thing more maritime than a ship, and that is the sea itself"? But Rodrigue held that a worker falling to his death aboard a ship was not covered by maritime law. The High Court made reference to the non-maritime nature of these accidents, calling them not "the ordinary stuff of admiralty." Hopefully, this matter will be

---

[152] 293 F.2d at 65, note 6.

cleared up by further word from the Supreme Court at an early date. Certainly, it seems desirable that injured workers (or their widows) should be able to determine what law governs their cases. They need to be able to seek swift and substantial justice instead of floundering for years in a sea of cross currents only to end up in a bog of quicksand-like legal technicalities.

With respect to personal injury or property damage caused by a collision, the law seems to be in the midst of development. In Rodrigue, the Supreme Court offered the following comment:

> ... But when the damage is caused by a vessel admitted in admiralty jurisdiction, the Admiralty Extension Act would now make available the admiralty remedy in any event.[153]

The Act referred to, as quoted by the Court, states:

> The admiralty and maritime jurisdiction of the United States shall extend to and include all cases of damage or injury, to person or property, caused by a vessel on navigable water, notwithstanding that such injury or damage be done or consummated on land.[154]

But the Court also made such statements as:

---

[153] 395 U.S. at 360.

[154] 46 U.S.C. § 740.

> ... And the very decision (of Congress) to do so in the initial bill (O.C.S. Lands Act) recognized that if it were not adopted explicitly, maritime law simply would not apply to these stationary structures not erected as navigational aids.... [155] (parenthetical matter added).
>
> ... The legislative history of the Lands Act makes it clear that these structures were to be treated as islands or as federal enclaves within a landlocked State....[156]

The Admiralty Extension Act ("Shore Damage Act") has also been held to provide admiralty jurisdiction when it is damage to a vessel which is complained of when the boat strikes a breakwater (where the plaintiff's theory was negligent maintenance of the lights).[157]

Before concluding that the law is clear, let us consider the case of a ship owned by a Liberian corporation, manned by a Greek crew and insured by British underwriters, which collides with an oil drilling platform on the Outer Continental Shelf many miles beyond the territorial sea of Louisiana.[158] The collision was

---

[155] 395 U.S. at 364.

[156] 395 U.S. at 361.

[157] Dibble v. United States, 295 F.Supp. 669 (D.C. N.D. Ill. 1968).

[158] Continental Oil Co. v. London Steam-ship Owners' Mutual Ins. Ass'n., Ltd., 417 F.2d 1030 (5Cir. 1969).

caused solely by the negligence of the ship and resulted in damage to the platform of $247,500. The ship proceeded to Texas, where it was libelled in rem, a petition filed for limitation of liability (to the value of the vessel), and damages finally paid by the shipowner in the sum of $147,500. The Texas litigation was thereupon dismissed without prejudice. This left the platform owner with a $100,000 net loss, due to the ship's admitted fault. The liability insurance policy on the ship had not been exhausted and Louisiana has a "Direct Action Statute"[159] which allows suits against insurers without proceeding through suit and judgment against the insured. In addition, the insurance company had an office in Louisiana and could be served there. So, suit was filed on the admiralty side in the United States District Court in Louisiana, but under the Louisiana Direct Action Statute. The trial court approached the problem in a matter-of-fact way. It held that since the accident happened far beyond the boundaries of Louisiana, that State's Direct Action Statute would not apply.[160] In other words, the statute had no extraterritorial effect.[161]

---

[159] L.R.S. 22: 655.

[160] 417 F.2d at 1033.

[161] Id.

The Fifth Circuit Court of Appeals felt, however, that a more subtle and sophisticated approach was called for, saying:

> That destination was correct and we affirm, although the course was wrong since the dead reckoning did not reckon with the Outer Continental Shelf Lands Act and specifically whether under it Louisiana's Direct Action Statute has been adopted as federal law and made applicable to this case. Disclaiming any prescience superior to that of the Trial Judge, ... the course has been plotted for us by the stellar-aided inertial guidance system of the recent intervening decision in Rodrigue .... (citations omitted).[162]

Addressing itself to the position of the plaintiff-appellant, the Court went into the question of federal or state law as being applicable to structures and viewed the Supreme Court's decision this way:

> ... The Court in Rodrigue traces the ebb and flow of legislative tides from which came the scheme of federal adoption of applicable adjacent state law as binding federal law. Under this scheme federal law and jurisdiction are the sole source of governmental power with that federal law coming from (i) federal law and (ii), where applicable, law of the adjacent state ...[163]

The language of the opinion is replete with psuedo-nautical phrases and barely disguised sarcasm

---

[162] Id.

[163] Id.

about the Rodrigue decision. One does not easily conclude that the Court of Appeals mentions by name the author of the Rodrigue opinion merely because he comes from the landlocked State of Colorado. The reluctance to accept whole-heartedly the Rodrigue holding is seen again when the Fifth Circuit deals with the baffling anomaly created by its very recent decision holding that the Louisiana Direct Action Statute applies to maritime cases occurring on inland waters (to allow the plaintiff to recover against the insurer beyond the limit of liability to which the shipowner is entitled).[164] The Court handles the problem as follows:

> Thus, while it does not offend the constitutional imperative for the uniformity of admiralty for the Louisiana Direct Action Statute to apply to maritime cases occurring on inland waters of Louisiana, quite different considerations enter in mandatorily applying that (the Direct Action Statute) to some--but a very select class--cases on the Outer Continental Shelf. The class is select in the sense that it must somehow be physically-causally related to the structure ("artificial island") without which Louisiana law is as irrelevant as that of Pakistan. This has nothing to do with so-called Louisiana interests. For no matter how closely related to Louisiana interests, for example, of local ownership of vessels involved, the Louisiana residence of operating crew members, performance of specific work for Louisiana based concerns, the transportation of men or materials

---

[164]Olympic Towing Corp. v. Nebel Towing Co., Inc. 419 F.2d 230 (5 Cir. 1969).

> to and from Outer Continental Shelf Land drilling sites, or the like, the Direct Action Statute could not be invoked for any one of a countless variety of maritime cases--collision, capsizing, personal injury, cargo loss--unless there is a causal connection with the fixed structure.[165] (first parenthetical phrase added).

If this reasoning seems contrived, we need only consider the phrases at the beginning of the quotation about the constitutional mandate for uniformity which the Court is enforcing so zealously. Such zeal results in the direct action against the insurer being available depending on the magic of the boundary line between state and other waters. This is uniformity? But Rodrigue was not based on whether or not the waters were high seas, or territorial seas, or inland seas. It was based on the intent of Congress that the platforms be treated as islands or federal enclaves within a landlocked state. As the Supreme Court pointed out, Congress recognized that federal law was never intended to be an all-inclusive code and needed to be supplemented by state law, so long as state law was not inconsistent with federal law.[166] What

---

[165] 417 F.2d at 1037.

[166] 395 U.S. at 361, 366.

conclude that the State Direct Action Statute can be used where Congress did not incorporate state law into federal law (inland waters), but cannot be used in a Shelf case where both Congress and the Supreme Court have expressly stated that federal law includes state law! But the sorcery does not end there. The Court talks at length about the fact that this platform is located fifty miles at sea. That it is in the shipping lanes, where in a flight of almost poetic fancy, the opinion takes note of foreign flag vessels bound from foreign places to non-adjacent states, or through the Panama Canal, and so on, and so on, finally coming to the exquisite non-sequitur:

> These considerations become more significant in the light of today's multiparty donnybrooks, see Grigsby v. Coastal Marine Service, 5 Cir., 1969, 412 F.2d 1011, A.M.C. in which theories of initial, contingent and secondary liabilities orbit to an imaginative apocenter .... it is quite conceivable that ... by a series of fictions and theories a foreign underwriter, or both, find the freedom of the seas disrupted by a statute of a state not then visible and to which neither ever intended to go.[167] (emphasis added).

Since the Court stated that it was basing its decision on this last quoted reasoning, as well as on the federal law, we are faced with a new doctrine.

---

[167] 417 F.2d at 1040.

Suit against an insurance company is somehow thought to be an infringement of the right to navigate on the high seas. Building the platform in the first place unquestionably restricts ship navigation. They should avoid that spot or a collision will ensue. All islands, natural or artificial, must be avoided by prudent navigators. But a procedural nicety about bringing suit directly against the insurer of an admitted tortfeasor? This hampers navigators? On the contrary, maybe shipowners and their navigators would be careful not to collide with platforms if their insurers were to hike the retrospective ratings (on which premiums are based) every time culpability results in a suit against the insurer.

(2) Oil Spills

Spills from tankers are not peculiar to offshore operations; it matters little whether or not the oil originated from a land well or an offshore platform when a tanker hits a reef. Undersea storage tanks, just coming into use may present some problems, but at the present time, no particular law has been generated about them.[168]

---

[168]World Oil, Oct. 1969.

It seems probable that such undersea storage tanks will be considered to be "offshore facilities" under the "Water Quality Improvement Act of 1970."[169] In that Act, new rules are prescribed for oil spills from "offshore facilities" (as well as many other rules not germane to this study).

The first difficulty under the new Act, is the definition of "offshore facility." The definition in Section 11 (a) (11) reads:

> (11) "Offshore facility" means any facility of any kind located in, on, or under any of the navigable waters of the United States other than a vessel or a public vessel; ...

Intensive research fails to reveal any claim that "navigable waters of the United States' extend beyond the three-mile limit. On the contrary, the United States has consistently maintained that its territorial sea is three miles wide.[170] The Outer Continental Shelf Lands Act makes it clear that there is no claim to the waters above the shelf, stating:

---

[169] Water Quality Improvement Act of 1970, ___U.S.C.___, H. R. Rep. No. 91-940, 91st Cong., 2nd Sess.

[170] Whiteman Digest, 14-53; cf. Cunard v. Mellon, 262 U. S. 100 (1923).

> (b) This subchapter shall be construed in such manner that the character as high seas of the waters above the Outer Continental Shelf and the right to navigation and fishing therein shall not be affected....[171]

Even though Contiguous Zones have been established outside of the territorial sea, they are special purpose zones to prevent or punish infringement of customs, fiscal, sanitary, immigration or fishing regulations.[172] Such zones do not amount to a claim of territoriality because by definition they are outside of the territorial sea.[173]

Since the Outer Continental Shelf is defined as the submerged lands lying seaward of the three mile limit (nine miles for the Gulf coasts of Texas and Florida), it appears at first reading that the new oil pollution rules may not apply to platforms on the shelf.[174] It seems that Congress intended this result, for the "Statement of the Managers on the Part of the

---

[171]43 U.S.C. § 1332 (b).

[172]<u>Whiteman Digest</u>, 482-498.

[173]Convention on the Territorial Sea and the Contiguous Zone, Article 24, adopted by the United Nations Conference on the Law of the Sea, April 29, 1958, 15 U.S.T. 1606, 1608, T.I.A.S. 5639 (in force Sept. 10, 1964).

[174]43 U.S.C. § 1331.

House" contains the following:

> ... This would include offshore drilling rigs as well as all other offshore facilities within the navigable waters of the United States which, in the case of the coastal waters would extend to the seaward boundaries of the States within the meaning of the Submerged Lands Act.... [175]

To be sure, the prohibitive language of the new Act is broad. Section 11 (b)(2) contains this operative language:

> (2) The discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into the waters of the contiguous zone in harmful quantities ... is prohibited.... [176]

The word "discharge" is defined in Section 11 (a)(2) as follows:

> (2) "discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping; ... [177]

Query: does a leak from a rig fifty miles off the coast amount to a discharge when the oil reaches the contiguous zone? If it be argued that the emission was

---

[175] H. R. Rep. No. 91-940, 91st Cong., 2d Sess. 37 (1970).

[176] *Id.*, at 87.

[177] *Id.*, at 86.

not "into or upon the waters of the contiguous zone," could not the reply be that there will almost never be a discharge directly onto "adjoining shorelines" from "offshore facilities" but that such an event is obviously meant to be covered? So, if the oil emitted by a leak from a well two miles offshore must travel two miles before it reaches shore, is it any less a discharge onto an adjoining shoreline? To state that such a leak (two miles offshore) is a discharge into territorial waters and is prohibited under that part of the proscription is to beg the question by reading Section 11(b)(2) as though it did not contain the words "adjoining shorelines." But if oil spilled two miles offshore can be a discharge onto the shoreline, this line of reasoning would go, why cannot oil spilled fifty miles out be considered a discharge into the contiguous zone?

The Act offers only sparse clues in this regard. Most of the balance of Section 11 is taken up with providing detailed and specific penalties for operators of vessels, onshore facilities and offshore facilities. Since the penalties are directed to "offshore facilities," which are within the three-mile limit (nine miles for the Gulf coasts of Texas and Florida), apparently the Act is not directed toward operators of rigs farther from shore. Section 11(i) provides an incentive for an operator to clean up spills even though he would have a defense to a claim against him. Thus, the law allows an operator to recover from the United States the clean-up costs incurred, if he can prove that the spill resulted from act of God, act of War, negligence on the part of the United States Government, or an act or omission of a third party. A confusing note is struck by paragraph (2) of Section 11(i), however, when it states:

> (2) The provisions of this subsection shall not apply in any case where liability is fixed pursuant to the Outer Continental Shelf Lands Act.

The Statement of the House Managers makes it clear, however, that this last quoted provision refers to liability " ... <u>established by regulations adopted under authority of</u> the Outer Continental Shelf Lands Act.... "[178]

A fair reading of these materials would, it is submitted, lead to the conclusion that Congress was content to rely on the regulations issued by the Secretary of the Interior for oil rigs located on the

---

[178]<u>Id</u>., at 41.

Outer Continental Shelf, but felt that Congressional action was necessary to regulate the areas under state control. The regulations issued by the Secretary appear in Title 30, Code of Federal Regulations, Chapter II, Part 250. The publicity and outcry following the Santa Barbara Channel spill caused the Secretary to issue extensive amendments to the regulations.[179] Section 250.43 of the new regulations imposes on the lessee the obligation to clean up pollutants but subsection (c) thereof provides:

> (c) The lessee's liability to third parties, other than for cleaning up the pollutant in accordance with paragraph (b) of this section shall be governed by applicable law.

"Applicable law" is state law under the Outer Continental Shelf Lands Act.[180] Subsection (o)(1) of Section 11 of the "Water Quality Improvement Act of 1970"[181] contains language apparently designed to achieve a similar situation, namely:

> (o)(1) Nothing in this section shall affect or modify in any way the obligations of any owner or operator of any vessel, or of any

[179] 161 Fed. Reg. 13544-13548 (1969).

[180] 43 U.S.C. § 1333 (a)(2).

[181] Supra, note 169.

> owner or operator of any onshore facility or offshore facility to any person or agency under any provision of law for damages to any publicly-owned or privately-owned property from a discharge of any oil or from the removal of such oil.

The second and third paragraphs of subsection (o) preserve the state's right to impose its own requirements and liability rules.

Thus, we see the double anomaly:

(a) the whole of the federal legislation and regulations leaves the rights of third persons whose property is damaged or whose health is injured, to be resolved under state law;

(b) The state law to be applied is current state law inside the three or nine mile limits of state jurisdiction but state law as it existed in 1953 for the shelf outside of state jurisdiction.

Whether inside or outside the state offshore boundary, of course, the one causing the pollution has the financial obligation for clean-up of the pollutant. Under the new Act, a species of absolute liability is imposed, with only four defenses, namely, act of God, act of war, negligence of the United States Government or act or omission of a third person.[182] There is a limit of liability to eight million dollars, except that in the case of wilful negligence or wilful misconduct, there is no limit. In the Secretary's regulations for the Outer Shelf, there is no dollar limit, but neither does there seem to be an imposition of strict liability. Indeed, the language is unfortunate in that it smacks somewhat of the concept of common law negligence. For example, Reg. Section 250.43 (b) states in part:

> ... the control and total removal of the pollutant, wheresoever found, <u>proximately resulting therefrom</u> shall be at the expense of the lessee.... (emphasis added).

Earlier in the same subsection, the obligation for clean-up expense is also qualified by the phrase " ... and such pollution <u>damages</u> or threatens to <u>damage</u> aquatic life, wildlife, or public or private property ... " (emphasis supplied). With notions of two of the elements of negligence appearing in the regulation, it could well be argued that the liability envisioned is one where there is some sort of fault involved. If that be so, operators on the Outer Shelf could have defenses not

---

[182]Water Quality Improvement Act of 1970, § 11 (f)(3), ___U.S.C.___, <u>H. R. Rep. No. 91-940, 91st Cong., 2nd Sess.</u>

available to those inside the three or nine mile limits.

(3) Fiscal and Customs Rules.

A letter from a mid-level official of the United States Treasury Department, written in 1967, is relied upon by most commentators as determinative of the fact that "minerals from the Outer Continental Shelf are considered to be taken from the territory of the United States and are therefore not treated as imported merchandise for customs purposes."[183] Since the Interior Department issues leases based on the Outer Continental Shelf Lands Act, such a determination makes good sense.

What about the depletion allowance for income tax purposes? Section 611 of the Internal Revenue Code of 1954 describes the allowance in general terms and gives the Secretary of the Treasury broad power to define its limits in regulations. Treasury regulations Section 1.611-1 (b) provides:

---

[183] G. Miron, Problems of Mineral Exploitation Within Coastal State Jurisdiction, delivered before the Institute of Ocean Law, Miami, Fla., December 11, 1969, citing letter from E. F. Kilpatrick, Division of Tariff Classification Ruling, Bureau of Customs, U. S. Treasury Dept., to J. Leslie Goodier, United Aircraft Corp., May 18, 1967 (hereinafter cited as "Miron Paper").

> Economic Interest. (1) Annual depletion deductions are allowed only to the owner of an economic interest in mineral deposits or standing timber. An economic interest is possessed in every case in which the taxpayer has acquired by investment any interest in mineral in place or standing timber and secures, by any form of legal relationship, income derived from the extraction of the mineral or severance of the timber, to which he must look for a return of his capital .... (emphasis added).

No case has been found wherein the Internal Revenue Service challenged the deduction by a lessee on the basis that the lessor (Interior Department) did not own the Shelf area which was leased to the taxpayer. A reading of the regulation itself ("acquired by investment any interest") would indicate that there is no reason for difficulty on this point. The closest case found deals with offshore oil deposits which were "whip-stocked," i.e., drilled on a slant from sites on shore.[184] In order to qualify as bidders for the right to take oil, under California law the oil companies had to demonstrate to the State that they had appropriate easement agreements with upland owners. The easement agreements provided for payment of a percentage of net profits to these upland owners. It was the depletion allowance on these percentage payments which was in

---

[184] Commissioner v. Southwest Exploration Co., 350 U. S. 308 (1955).

dispute; that is, the allowance was claimed by both the upland owner and the oil companies. The opinion of the Court contained the following analysis:

> Southwest contends that there can be no economic interest separate from the right to enter and drill for oil on the land itself. Since the upland owners did not themselves have the right to drill for offshore oil, it is argued that respondent--who has the sole right to drill--has the sole economic interest. It is true that the exclusive right to drill was granted to Southwest, and it is also true that the agreements expressly create no interest in the oil in the upland owners. <u>But the tax law deals in economic realities, not legal abstractions,</u> and upon closer analysis it becomes clear that these factors do not preclude an economic interest in the upland owners.... (emphasis added).
>
> * * *
>
> Recognizing that the law of depletion requires an economic rather than a legal interest in the oil in place, we may proceed to the question of whether the upland owners had such an economic interest here.... This contribution (of the use of land under the easement agreements) was an investment in the oil in place sufficient to establish their economic interest. Their income was dependent entirely on production, and the value of their interest decreased with each barrel of oil produced. No more is required by any of the earlier cases.[185] (parenthetic matter added).

Under this reasoning, it would seem clear that an offshore operator who paid a huge cash bonus, plus an agreed royalty, would have an obvious economic interest in the oil in place without regard to esoteric reflections

---

[185] Part IIB, <u>supra</u>, and note 91.

on whether the lessor owned something less than fee simple. Again, it should be emphasized that, in the Southwest case, it was only the deduction by the upland owners which was in question. The Internal Revenue Service made no challenge at all to the deduction by the oil companies with respect to their own share of the income. Furthermore, the tax years in question were 1939 through 1948, a time when the Supreme Court held (in the first California tidelands decision) that the State of California did not and never had owned the submerged lands out to the three-mile limit.[186]

The "Tax Reform Act of 1969" (P.L. 91-172; approved Dec. 30, 1969; 83 Stat. 487) added a new section 638 to the Internal Revenue Code of 1954, for the purpose of applying the income and employment tax provisions of the Code to activities on the Shelf. Paragraph (1) thereof provides:

> (1) the term "United States" when used in the geographical sense includes the seabed and subsoil of those submarine areas which are adjacent to the territorial waters of the United States and over which the United States has exclusive rights, in accordance with international law, with respect to the exploration and exploitation of natural resources; ....

---

[186] United States v. California, 332 U.S. 19 (1947).

By its terms, this section is limited to a particular purpose (tax applications) and the definition is constrained by the phrase "in accordance with international law." Nevertheless, it amounts to a declaration by the Congress, approved by the President, that the term "United States" includes the shelf. While this enactment seems to settle the questions of source for tax and customs purposes, it may also add weight to the argument that the United States continues to claim and enforce on the Shelf rights very much analogous to ownership of territory. Why else did Congress use the language " ... when used in the geographical sense ..."?

Certainly, it would have been within the power of Congress to say that income received from activities on the Shelf would be taxable as though it were income from United States sources, whether or not it was actually derived within the geographical limits of the nation. By choosing the route of defining the geographical United States as including the Shelf, Congress has taken another stride toward full territorial sovereignty on the Shelf.

(4) Hard Minerals

Despite glowing "reports" in Sunday supplements and similar features in other media, ocean mining of hard minerals is largely visionary and speculative. For example, it was reported that, in 1967, one billion dollars of minerals (exclusive of oil and gas) were taken from offshore activities.[187] When examined, however, this total includes (a) coal recovered through tunnels from shore; (b) chemicals recovered from sea water; and (c) common sand, oyster shells, gravel and sulfur. When the foregoing are excluded, the figure is reduced to fifty million dollars for offshore production of tin, iron, heavy metals and diamonds.[188] Because of these relatively miniscule operations, spread around the world, no prominent pattern of claim and decision processes has developed.

The most significant legal problem at present for United States mining interests is the competitive bidding requirement of the Outer Continental Shelf Lands Act.[189] The argument of industry is that the competitive bidding procedures were designed for the petroleum industry which has a highly developed, even

---

[187] COMSER Report, 132.

[188] Part IIB, *supra*, and note 91.

[189] 43 U.S.C. § 1337.

sophisticated, technology and experience searching for deposits on land.[190] The petroleum deposits on land and offshore are both subsurface and the same techniques for locating them are used in both places. Similarly, the same techniques used for recovery of petroleum resources on land can be used for offshore operations (drilling and pumping). But mining of hard minerals is another story entirely.[191]

For one thing, most rich ore deposits being mined on land were exposed at the surface and were discovered by surface prospecting.[192] Only in the last few years has the mining industry made any real effort to find deposits not indicated by surface characteristics.[193] Beyond mere discovery, a whole new technology for recovery must be devised. The open pit, or the deep mine with a network of tunnels, may have to undergo extensive metamorphosis when transplanted to offshore locations.

---

[190] COMSER Report, at 195, 196.

[191] Id.

[192] Vol. 2, Panel Reports of the Commission on Marine Science, Engineering and Resources, Panel VI, page VI-181 (hereinafter cited as "Panel VI Report").

[193] Id.

Industry is arguing for the privilege of developing any commercial deposits it discovers, without bidding for the privilege. The Stratton Commission has recommended that the law be changed so that the Secretary of the Interior be allowed flexibility in awarding rights to develop hard minerals on the Shelf.[194]

(5) Boundaries.

As mentioned earlier, the outer boundary of the Continental Shelf is the subject of disagreement and speculation. Reams have been written on the subject and doubtless there are numerous scholars ready to publish more. Most of the commentators use either a concept of lateral distance from the coast line or a depth contour line, or both.[195] It is not intended to repeat the arguments here, except to say that both notions have become irrelevant with the increase in knowledge about the structure of the earth's crust. Geologists now know that the continents are "blocks" or "icebergs" of granitic rock resting on the crust of basalt which encircles all the earth.[196]

---

[194] Id.

[195] COMSER Report, 143-145; Panel VIII Report, VIII-10 to VIII-43.

[196] Part II, supra.

These blocks are partially submerged at the present time, but a few thousand years are only an instant in geologic time. Thus, it may be time for the law to attempt to catch up with developing scientific and factual knowledge.

Other boundary problems have significance as well, however, and the handling of such problems may have a bearing on the outer boundary question. For example, the <u>North Sea Continental Shelf Cases</u>[197] dealt with the question of what legal principles must be applied in order properly to delimit the Germany-Denmark and the Germany-Netherlands boundaries on the Shelf. In order to discover and expound on such principles, it was necessary for the Court to examine the whole basis for the legal concept of national rights in the Shelf.

Although Germany was a signatory of the 1958 Geneva Conventions, it has not ratified them, and the Court held that Germany could not be held to them under any theory that the principles embodied in Article 6 of the Shelf Convention had become customary

---

[197] (1969) I.C.J. 3.

international law.[198] Thus, the Court was looking to general law and was not bound by any particular language of the Shelf Convention.

Flanked on the West by the Netherlands and on the East by Denmark, the coastline of Germany on the North Sea is markedly indented. If either (a) an extension of the land boundaries, or (b) median lines, were drawn, Germany would receive a very slim wedge of Continental Shelf, while its small neighbors would enjoy large pieces indeed. Germany argued for the principle that it should receive a "just and equitable share" of the shelf, while its opponents supported the median line theory. In rejecting the German position, the Court examined the nature of a state's rights in the Shelf, saying in paragraphs 18 and 19:

> ... Delimitation in an equitable manner is one thing, but not the same thing as awarding a just and equitable share of a previously unlimited area, even though in a number of cases the results may be comparable, or even identical.
>
> 19. More important is the fact that the doctrine of just and equitable share appears to be wholly at variance with what the Court entertains no doubt is the most fundamental of all the rules of law relating to the continental shelf, enshrined in Article 2 of the 1958 Geneva Convention, though quite

---

[198] Id., at 28.

> independent of it,--namely that the rights of the coastal State in respect of the area of the continental shelf that consitutes a natural prolongation of its land territory into and under the sea exist ipso facto and ab initio, by virtue of its sovereignty over the land, and as an extension of it in an exercise of sovereign rights for the purpose of exploring the seabed and exploiting its natural resources. In short, there is an inherent right. In order to exercise it, no special legal process has to be gone through, nor have any special legal acts to be performed. Its existence can be declared (and many States have done this) but does not need to be constituted. Furthermore, the right does not depend on its being exercised.... [199]

The Court examined "the literature of the subject"[200] concerning proximity of the Shelf to the coastal state as a grounds for its claim to that Shelf, and the terms used to express the notion in proclamations, conventions and other instruments, including:

> ... terms such as "near," "close to its shores," "off its coast," "opposite," "in front of the coast," "in the vicinity of," "neighbouring the coast," "adjacent to," "contiguous," etc.,--all of them of a somewhat imprecise character which, although they convey a reasonably clear general idea, are capable of a considerable fluidity of meaning. To take what is perhaps the most frequently

[199] Id., at 22, 23.

[200] Id., at 30, 31.

> employed of these terms, namely "adjacent to," it is evident that by no stretch of imagination can a point on the continental shelf situated say a hundred miles, or even much less, from a given coast, be regarded as "adjacent" to it, or to any coast at all, in the normal sense of adjacency, even if the point concerned is nearer to some one coast than to any other.... (emphasis supplied).[201]

Summing up the legal principles giving rise to rights in the Shelf, the Court stated:

> 43. More fundamental than the notion of proximity appears to be the principle ... of the natural prolongation or continuation of the land territory or domain, or land sovereignty of the coastal State, into and under the high seas, via the bed of its territorial sea which is under the full sovereignty of that State. There are various ways of formulating this princple, but the underlying idea, namely an extension of something already possessed, is the same, and it is this idea of extension which is, in the Court's opinion, determinant. Submarine areas do not really appertain to the coastal State because--or not only because--they are near it. They are near it of course; but this would not suffice to confer title, any more than, according to a well established principle of law... mere proximity confers no title to land territory. What confers the *ipso jure* title which international law attributes to the coastal State in respect to its continental shelf, is the fact that the submarine areas concerned may be deemed to be actually part of the territory over which the coastal State already has dominion,--in the sense that,

---

[201] *Id.*

> although covered by water, they are a prolongation or continuation of that territory, an extension of it under the sea....[202] (emphasis by the Court).

From this case, it can be concluded that:

> (a) under international law, the rights of coastal states in the Shelf always existed, even though for most of man's history nothing was done about exercising them for lack of appropriate technology;
>
> (b) since there is no need for any constitutive process to acquire these rights, the Truman Proclamation, proclamations of other states, and, indeed, the 1958 Shelf Convention, were unnecessary;
>
> (c) the concept of "adjacency," so much relied upon those who examine, re-examine and re-re-examine the language of the 1958 Shelf Convention, becomes merely a vague and fluid description of approximate location; not part of a constitutive grant or limitation of rights;
>
> (d) the rights of the coastal state in the Shelf amount to "title" and Shelf areas are "territory" of that state.

In the case presently being litigated in the United States Supreme Court, as the Court of original jurisdiction, wherein the United States is suing thirteen Atlantic Coastal States in a suit"...brought to establish, as against the defendant States, the rights of the United

---

[202] Id., at 31, 32.

States in the lands and natural resources of the bed of the Atlantic Ocean more than three geographical miles from the coast line ... ",[203] it appears that both sides are arguing the questions of:

(1) rights in the Shelf which may or may not have been acquired from the Crown of England before or at the time of the establishment of the Union;

(2) boundaries of the coastal States in and under the Atlantic Ocean.

As in the California, Texas, Louisiana and Florida cases,[204] the real stake is revenue from possible mineral resources. Should the royalties go to the Federal Government, the States, or be divided between them? It is impossible, of course, to predict the final outcome of this litigation with any certainty. It is submitted, however, that the defendant States will be in a poor posture if they merely attempt to re-hash the defunct arguments of ancient grants or acquisitions.

---

[203] Atlantic Shelf Case, part I A, supra, and note 4.

[204] United States v. California, 332 U. S. 19(1947); United States v. Texas, 339 U.S. 707(1950); United States v. Louisiana, 339 U.S. 699(1950); United States v. Florida, 363 U.S. 121(1960).

Similarly, the States face extreme difficulty if they rely on boundary propositions.

Avoiding the dual traps of ancient grants and boundaries, it is suggested that the defendant States could forge a new set of principles from which they could argue for concurrent jurisdiction.

If the International Court of Justice is correct in the conclusion that there always was an inherent right of the coastal nation-state and, further, that the Truman Proclamation of 1945 was the starting point of juristic development of the concept,[205] it could be pointed out that:

(a) neither the Truman Proclamation,[206] the Executive Order issued concurrently with it,[207] the Submerged Lands Act,[208] nor the Outer Continental Shelf Lands Act[209] purported to take anything away from the States of the Union; on the contrary, whatever rights the States may have had were expressly preserved;[210]

---

[205](1969) I.C.J. 33.
[206]supra, note 16.
[207]supra, note 46.
[208]43 U.S.C. § 1301-1315.
[209]43 U.S.C. § 1331.
[210]supra, note 16.

(b) since nothing was taken away, the natural prolongation of the territory of a coastal State of the Union is submerged land over which it retains rights vis-a-vis the Federal Government for some purposes; and

(c) there is nothing startling or revolutionary about concurrent Federal-State jurisdiction on the Shelf, for it already exists in at least two areas, namely, for injury on or damage to offshore oil drilling rigs and oil pollution beyond the three or nine mile limits.[211]

[211] Part IV B(1), *supra*.

V. Decision Making for the Shelf

A. Who are the Decision Makers?

With respect to acts of coastal states, it is clear from the foregoing review that there is no one official or department of government which can be singled out as the primary source of law for the Shelf. Even in the United States, where we preserve the tradition of separation of powers, it is certainly apparent that all three branches of government have taken part in shaping existing rules of decision. Even different levels of government take part, i.e., Federal, State and, in some instances, local.

On the international scene, we observe unilateral proclamations, bilateral arrangements,[212] multilateral treaties (the 1958 Shelf Convention), the I.C.J. decision, and debates and resolutions in the United Nations.

---

[212] See, e.g., World Oil, Dec., 1969, 19, wherein it is reported that Indonesia and Maylasia had signed an agreement defining the limits of their shelves.

A really potent set of decision-makers are, of course, the business firms and associations which develop and apply techniques for Shelf exploration and exploitation. The day-to-day decisions of such groups on whether or not to go ahead with a particular project provide the factual situations to which legal rules must apply, and which, in turn, necessarily shape the very law which is applied to them. This is not to say that decision making for the Shelf is done by some incomprehensible hodge-podge of unknown and unidentifiable processes. Rather, it is to point out that, in common with many areas of social intercourse, a variety of forces are at work.

B. Goals of Decision Makers

Here again, it is easier to list the objectives sought to be gained by various actors in the arena than to explain accurately the bases for them. Economic benefit is obvious, for mineral extraction historically has meant wealth, employment and industrial advantage. At least with respect to oil and gas, a nation which has military ambitions or fears will naturally want to control sources of supply. Ideological goals include notions of national or racial pride, the desire for recognition, the need to demonstrate the superiority of a particular political creed, dreams of aggrandizement or even domination, and humanitarian purposes of using natural resources for the benefit of all mankind. The quest for enlightenment, while difficult to evaluate definitively, unquestionably plays a part. Finally, concepts of right and wrong, or standards of rectitude, should always be considered. Some of these goals must inevitably conflict, so that a final goal is, or ought to be, the accommodation of conflicting claims.

C. Method of Decision

As in many areas of legal development, a system of hindsight has been used. In large part such a system is necessary simply because no one has yet invented a workable crystal ball. Outer Continental Shelf Law, however, came into being instantly and prospectively with the Truman Proclamation.[213] That President Truman and his advisers were possessed of extraordinary foresight on this point is hardly open to doubt. Undoubted also, is that they opened a whole new area for juridical development. Since that time, however, most decision making has been retrospective, that is to say, situations develop

---

[213] See, Matson Navigation Company v. United States (The Montebello), 141 F. Supp. 929 (Ct. Cl. 1956).

and decision makers look back on them in formulating and invoking rules.

The basic theorem of international law is that it is based on "custom" (of civilzed nations).[214] By their nature, courts must deal with justiciable controversies which have already arisen. Even the legislation of the United States since 1945 has dealt with factual situations which already were productive of controversy. The Submerged Lands Act and the Outer Continental Shelf Lands Act (1953) were intended to deal with the tidelands controversy which started with the first California Case (1947). Similarly, the Water Quality Improvement Act of 1970 was stimulated by the massive tanker spills and offshore drilling rig spills of recent years.

To be sure, there are ideas and propositions for new and comprehensive decisions of a prospective nature. The Stratton Commission, for one, has made extensive proposals looking toward future possibilities

---

[214]Case of the S.S. "Lotus," (1927) P.C.I.J., ser. A, No. 10.

with the purpose of avoiding foreseeable controversies.[215]

[215] _COMSER Report_, 145.

VI <u>Trends of Decision</u>.

In spite of pious declarations, heard in many quarters, about keeping the resources of the sea bed and subsoil available for the good of all mankind, objective reflection shows that the trend is exactly the opposite. The true fact is that, at the beginning of the twentieth century, a territorial sea of three miles was all that was claimed or recognized in international law.[216] At the present time, a majority of the coastal nations of the world are claiming territorial seas of more than three miles and an ever-increasing number are claiming a two hundred mile limit.[217] In what may be a move born of desperation, the United States has this year offered to agree to a twelve mile territorial sea (if agreement can be secured on other points not directly related to the Shelf).[218]

---

[216] Whiteman Digest, 14.

[217] Third Report of the President, Appendix C-4.

[218] Fishery Information Bulletin, Feb. 20, 1970, reporting a speech by the State Department Legal Adviser, John R. Stevenson, before the Philadelphia World Affairs Council and the Philadelphia Bar Ass'n., on Feb. 18, 1970.

The United Kingdom recently opened for bidding areas in the North Sea and the Irish Sea amounting to fourteen thousand square miles.[219] With offshore drilling increasing rapidly, Indonesia in the past few months awarded twenty-eight exploration contracts to twenty-seven companies.[220]

The United States Department of the Interior has been leasing at ever increasing depths and distances from shore.[221] The claim of trespass against those attempting to occupy the submerged Cortez Bank, one hundred ten miles off the California coast, indicates the thinking of that Department.[222]

Policy considerations notwithstanding, the plain fact is that states are asserting ever wider mastery over an ever wider Shelf.

---

[219] World Oil, Nov. 1969, 124.

[220] Id.

[221] Miron Paper, supra, note 183.

[222] Id.

VII Conclusions and Recommendations.

The purpose of examining a variety of claims and problems has been to indicate that two broad trends are discernable:

(a) In the international community, the less developed countries, rightly or wrongly, see it to be in their interests to oppose the schemes which are acceptable to the major powers, both East and West. That being the posture of nations, the possibility of international agreement on a comprehensive regime for offshore development on a world-wide basis appears remote.

(b) Business interests have not in the past stood still while delegates squabble in the committees of the United Nations and there is no reason to suppose that they will do so in the future. This means that national decision makers will continue to make decisions, often on a case-by-case basis. The numerous court decisions, the Interior Department leasing policies, the activities of other administrative agencies and the congressional hearings, all point this way. Personal injuries and property damage, desires for wealth or aggrandizement, needs for energy, research efforts and the military-defense posture of nations, all call for rapid decisions. While this method of decision is not necessarily perplexing to those trained in the common law system or the development of international law on the basis of custom among nations, it is a system of hindsight. Such a system necessarily gives rise to disputes and calls for decisions based on a grasp of the extensive interactions which may be produced by each result.

The Stratton Commission felt that many of the problems were caused by the definition of the Shelf in the 1958 Shelf Convention because it does not correspond to the geological definition, because the "adjacency" criterion creates doubts, because the "exploitability" criterion may extend the Shelf to the midline of the ocean, because the "CEP" countries used the Truman Proclamation as the basis for their territorial sea claims, and, finally, because it is unfair to the inland nations of the world.[223]

To forfend these criticisms, the Commission recommended:

(a) that the Shelf be redefined as extending to the "200-meter isobath, or 50 nautical miles from the baseline for measuring the breadth of its territorial sea," whichever alternative gives the coastal nation the greater area;[224]

(b) creation of an intermediate zone extending beyond the redefined Shelf to the 2,500-meter isobath, or 100 nautical miles from the baseline, whichever is greater.[225]

(c) creation of an International Registry Authority to administer rules for the intermediate zone and the deep sea floor beyond (the coastal nation would have the exclusive right to register claims in the intermediate zone but would still pay into

---

[223] COMSER Report, 143-145.

[224] Id., 145.

[225] Id., at 151.

an International Fund to be distributed among various costs and activities, including "aiding the developing countries through the World Bank United Nations Development Program and other international development agencies.").[226]

Were it not for the distinction, even eminence, of the membership of the Commission, it would be tempting to dismiss the whole scheme as whimsey. Since, however, it is a serious proposal laid before the President of the United States, close analysis is indispensable.

With full respect, however, it is here suggested that the rather obvious political purpose of appeasement is doomed ab initio and that, from a legal standpoint, enactment of the proposed rules would only compound the problems which they attempt to avert.

Historically, pusillanimous counsels of appeasement have served only as a goad, prodding claimants toward ever greater and more voracious demands. One need only recall Neville Chamberlain's infamous trip

[226]Id., at 149.

to Munich in 1938. A striking example in the instant case is that the Moratorium Resolution followed hard on the heels of the COMSER Report (within the same year).

The legal aspects of the Commission's proposals are also subject to doubt. For example, if the current definition of the Shelf is improper because it does not correspond with geological reality, how does it help to preserve the notorious 200 meter isobath rule but with a superimposed alternative of 50 miles lateral distance from a baseline? The Commission bases its suggested limits for the intermediate zone on the statement:

> The 2,500-meter isobath is considered by authorities to be the average depth of the basis (sic) of the world's geological continental slopes; 100 miles is the average width of the continental shelves and slopes.[227]

"Average" is synonymous with "mean," "median" or "norm."[228] All of these words refer to something which

---

[227]COMSER Report, 151.

[228]Webster's New Collegiate Dictionary (2d ed., 1953).

represents a middle point between extremes. Stating the obvious, then, the quoted statement is by its very terms inconsistent with reality. If one were to measure the depth of the foot of four slopes as 4,500 feet, 3,500 feet, 1,200 feet and 800 feet, their arithmetic "average" would be 2,500 feet.

Lateral distances of 50 and 100 miles from a baseline are subject to the same criticism and, further, would open the way for new disputes concerning (a) the baseline, and (b) the breadth of the territorial sea. Since the World Court has already held that states own the natural prolongation of the continents, without regard to proclamations or treaties, it seems unrealistic to ask them to give up large pieces of submerged territory in favor of some supernational regime.

As for the argument that the whole proposal is to avoid unfairness to nations which have little or no shelf (inland countries, for example), it is submitted that there are many other geographic and geologic differences which render nations unequal. South Africa has more diamonds than England, while Malta enjoys a balmier climate than does Iceland. Moreover, aid from "haves" to "have-nots" is nothing new and can be accomplished in many ways, either directly or through the numerous international organs already in existence.

In sum, it would be doubly regrettable to make bad law and then seek to justify it on a premise which is demonstrably specious.

While it is recognized that there is no all-encompassing panacea, one approach which might be helpful would be that of a massive educational effort. The thought here is that there is often a communications failure between the scientists and engineers on the one hand, and the lawyers, judges and government officials on the other. Some first steps have been taken in this area by conferences at a handful of educational institutions, attended by both lawyers and scientists. Committees of the American Bar Association have also done work in this direction. As one reads the lists of those who attend and are active in such efforts, the most striking fact is that the same names appear over and over again. Another fact is that the names of United States Federal judges almost never appear.

An elite and inbred corps of specialists is surely not the only answer. The literature on the subject has been written and re-written by the same people and appears for the most part in obscure scholarly journals.

One of the difficulties to be surmounted is that most of the universities which have oceanographic institutes of any stature do not have law schools and vice versa. To be sure, the lawyers must learn the language of the scientists and engineers but the problem cuts both ways. The oceanographers should begin to learn something about law and government. In colleges of business administration, it has been a standard requirement for many decades that students take courses in business law. Why not a parallel system with courses in ocean law for oceanographers?

The National Science Foundation, through its Sea Grant program, might be the ideal vehicle for this purpose. Notable in the Third Report of the President is the statement about the paucity of Sea Grant applications in the area of the social sciences, including law.[229]

---

[229] Third Report of the President, 140.

With all of the furor about pollution of the atmosphere and the marine environment, the public and public officials have become aware of some of the problems that exist. This creates a fine opportunity for knowledgeable commentators to communicate with the wider world. Their writings must be published, however, not in law reviews or technical journals, but in the mass media, such as popular magazines and newspapers.

Further, methods should be explored for improvement efforts directed toward the Federal judiciary, including possible reorganization of the courts. This is, of course, a delicate matter. But any lawyer knows that only a very few judges have any experience at all even in admiralty matters. Although it is an important segment, admiralty is only a part of the whole set of problems which must be solved in relation to the sea and the coastal zone. We already have special courts in the Federal system for particular fields of law. The Tax Court, the Court of Claims and the Court of Customs and Patent Appeals fit into this category.

Recognizing that it is impractical and maybe impossible to deprive the "Constitutional Courts"

(District Courts, Courts of Appeal and the Supreme Court) of their traditional jurisdiction, it is suggested that a court with parallel jurisdiction in Ocean Law could be established, much like the Tax Court.

As seen above, there are recurring problems which need prompt solution. Injured workers, and their families, are indifferent to the theoretical differences as to where the Shelf begins and ends. They need swift adjudication of their claims. Likewise, pollution and other environmental matters need rapid and knowledgeable attention. Moreover, the various sets of claims and claimants interact and call for development within a correlated setting of private, national and international goals.

Indeed, there is room for legislative efforts, including treaty possibilities; but they are attempts to visualize and forecast future occurrences and confrontations. To repeat, nobody has yet invented a reliable crystal ball. Thus, while visionaries ponder, actors proceed to explore and develop the resources of the sea and its bed. Current confrontations cannot wait. Uncertainty breeds caution on the part of investors and high insurance rates for those who move forward.

With well-defined limited jurisdiction and judges who would be specialists, the new Marine Court could offer litigants swift results within a framework attuned to their needs and the balancing needs of society. Resolution of difficult situations being the business of the law, let us get about our business.

* * *

BIBLIOGRAPHY

Articles

Emery, K. Geological Aspects of Sea Floor Sovereignty, in The Law of the Sea (L. Alexander, ed., 1967).

Finlay, L. The Outer Limit of The Continental Shelf. A rejoinder to Professor Louis Henkin, 64 Am. J. Int'l L. 42 (1970).

Friedmann, W. The North Sea Continental Shelf Cases--A Critique, 64 Am. J. Int'l L. 229 (1970).

Goldie. The Contents of Davy Jones's Locker--A Proposed Regime for the Seabed and Sub Soil, 22 Rutgers L. Rev. 1, (1968).

Henkin, L. A Reply to Mr. Finlay, 64 Am. J. Int'l L. 62 (1970).

Jennings, R. The Limits of Continental Shelf Jurisdiction: Some Possible Implications of the North Sea Case Judgment, 18 I.C.L.Q. 819 (1969).

Menard, H. and Smith, S. Hypsometry of Ocean Basin Provinces, 71 Jour. Geophys. Research, 4305 (1966).

Weeks, L. Offshore Petroleum Developments and Resources, 1969 Jour. Petroleum Technology, 377.

Books

Alexander, L. (ed.) The Law of the Sea--International Rules and Organization for the Sea (1969)

Alexander, L.(ed.) The Law of the Sea--The Future of the Sea's Resources (1968).

Alexander, L. (ed.) The Law of the Sea--Offshore Boundaries and Zones (1967).

Azuni, M. The Maritime Law of Europe (1806).

Baer, H. Admiralty Law of the Supreme Court (2d ed., 1969).

Black's Law Dictionary (4th ed. 1951).

Burke. W. Ocean Sciences, Technology, and the Future Internaternational Law of the Sea (1966).

Colombos, C. The International Law of the Sea (6th rev. ed., 1967).

Dagget, H. (ed.). Institute on Mineral Law; Louisiana State University Law School (1953).

Institute on Offshore Drilling Operations, University of Texas School of Law (1957).

McDonald, S. Federal Tax Treatment of Income From Oil and Gas (1963).

McDougal, M. and Burke, W. The Public Order of the Oceans (1962).

McDougal, M., Lasswell, H., Vlasio, I. Law and Public Order in Space (1963).

Menard, H. Marine Geology of the Pacific (1964).

Miller, K. Oil and Gas; Federal Income Taxation (1969).

National Petroleum Council. Petroleum Resources Under the Ocean Floor (1969).

The Sea and the States--Mutual Problems and the Solutions (proceedings of a conference held Nov. 20-23, 1968, at Miami, Florida).

Second United Nations Conference on the Law of the Sea (2 vols.). A/CONF, 19/8--19/9 (1960).

Shalowitz, A. Shore and Sea Boundaries (2 vols., 1962).

Slovenko, R. (ed.) Oil and Gas Operations (1963).

Sullivan, R. Handbook of Oil and Gas Law (1955).

Texas Law Review, Oil and Gas Law; with Articles Pertaining to Sulphur, Taxation, Tidelands, and Other Related Subjects. (Reprinted from Texas Law Review, 1951).

Thornton, W. The Law of Oil and Gas (1932).

United Nations Conference on the Law of the Sea, 6 vols., A/CONF. 13/37-13/42 (1958).

Webster's New International Dictionary of the English Language (2d ed. 1951).

Whiteman, M. Digest of International Law (1965).

Zaslawski, E. Oil Under the High Seas and Other Articles in International Law (1960).

Cases

Case of the S.S. "Lotus," (1927) P.C.I.J., ser. A, No. 10.

Chevron Oil Company v. M/V New Yorker, 297 F. Supp. 412 (D.C.E.D. La., 1969).

Commissioner v. Southwest Exploration Co., 350 U. S. 308 (1955).

Continental Oil Company v. London Steam-ship Owners' Mutual Insurance Association, Ltd., 417 F.2d 1030 (5 Cir. 1969).

Cunard v. Mellon, 262 U.S. 100 (1923).

Dibble v. United States, 295 F. Supp. 669 (D.C.N.D. Ill. 1968).

Dore v. Link Belt Company, 391 F.2d 671 (5 Cir. 1968).

Freeman v. Aetna Casualty and Surety Company, 398 F.2d 808 (5 Cir. 1968).

Kimble v. Noble Drilling Corporation, 416 F. 2d 847 (5 Cir. 1969).

Loffland Brothers Company v. Roberts, 386 F.2d 540 (5 Cir. 1967) cert. den. 389 U.S. 1040 (1968).

Matson Navigation Company v. United States (The Montebello), 141 F. Supp. 929 (Ct. Cl. 1956).

North Sea Continental Shelf Cases, (1969) I.C.J. 3.

Ocean Drilling and Exploration Company v. Berry Bros. Oilfield Service, 377 F2d 511 (5 Cir. 1967).

Offshore Company v. Robison, 266 F.2d 769.

Olympic Towing Corporation v. Nebel Towing Company, Inc., 419 F.2d 230 (5 Cir. 1969).

Pure Oil Co. v. Snipes, 293 F.2d 60(5 Cir. 1961).

Rodrigue v. Aetna Casualty and Surety Company, 395 U.S. 352 (1969).

Rodgrigue v. Aetna Casualty and Surety Company, 395 F.2d 216 (5 Cir. 1968).

Ryan Stevedoring Co. v. Pan-Atlantic S.S. Corporation, 350 U.S. 124 (1956).

United States v. California, 332 U.S. 19 (1947).

United States v. Florida, 363 U.S. 121 (1960).

United States v. Louisiana, 339 U.S. 699 (1950).

United States v. Maine, No. 35 Original (U.S. Supreme Court, filed June, 1969, 395 U.S. 955).

United States v. Ray 423F.2d16 (5 Cir., Jan 22, 1970, No. 27888).

United States v. Texas, 339 U.S. 707 (1950).

Newspapers and Magazines

Fishery Information Bulletin, Feb. 20, 1970.

Oceanology International (May/June, 1969).

Scientific American 221, No. 3 (Sept., 1969).

Under Sea Technology 10, No. 5 (May, 1969).

World Oil, Oct., 1969.

Informal Materials

Legislative Summary. Tallahassee: Florida Legislative Reporters, Inc., April 8, 1970.

Letter from E. F. Kilpatrick, Division of Tariff Classification Ruling, Bureau of Customs, United States Treasury Dept., to J. Leslie Goodier, United Aircraft Corp., May 18, 1967.

Letter from Edward Weinberg, Deputy Solicitor, United States Department of Interior, to Brig. Gen. John A. B. Dillard, Corps of Engineers, U.S. Army, Feb. 1, 1967.

G. Miron, "Problems of Mineral Exploitation Within Coastal State Jurisdiction," delivered before Institute of Ocean Law, Miami, Florida, Dec. 11, 1969.

Reports

Bulletin XIII, Department of State, No. 327 (1945).

Effective Use of the Sea, Report of the Panel on Oceanography, President's Science Advisory Committee (1966).

Hearings Before the Special Subcommittee on Outer Continental Shelf of the Senate Committee on Interior and Insular Affairs, 91st Cong., 1st and 2d Sess. (1969-70).

H. R. Rep. No. 91-940, 91st Cong., 2d Sess. (1970).

The International Petroleum Cartel, Staff Report to the F. T. C., Submitted to the Subcommittee on Monopoly of the Select Committee on Small Business, U.S. Senate, Committee Print No. 6, 82d Cong., 2d Sess. (1952).

Marine Science Affairs--A Year of Plans and Progress, the Second Report of the President to the Congress on Marine Resources and Engineering Development (1968).

Marine Science Affairs--A Year of Broadened Participation, The Third Report of the President to the Congress on Marine Resources and Engineering Development (1969).

V. McElvey and F. Wang, World Subsea Mineral Resources, Department of the Interior. United States Geological Survey, A Discussion to Accompany Miscellaneous Geologic Investigation Map 1-632 (1969).

Minutes of the State of Florida Board of Trustees of the Internal Improvement Fund (Aug. 26, 1969, and Feb. 3, 1970).

Our Nation and the Sea, a Plan for National Action, Report of the Commission on Marine Science, Engineering and Resources (1969).

Panel Reports of the Commission on Marine Sciences, Engineering and Resources (3 Vols., 1969).

Statutes and Regulations

Chap. 253 F. S. § 253.67-253.75 (Florida).

43 U.S.C. § 1301

43 U.S.C. § 1331.

46 U.S.C. § 740.

46 U.S.C. § 761, et seq.

L.R.S. 22:655 (Louisiana).

161 Fed. Reg. 13544-13548 (1969).

Revised Civil Code of Louisiana, Article 2315.

3 CFR, 1943-1948 Comp., 67.

Water Quality Improvement Act of 1970, ___U.S.C.___, H. R. Rep. No. 91-940, 91st Cong., 2d Sess.

Treaties

Convention on the Continental Shelf, adopted by the United Nations Conference on the Law of the Sea, April 29, 1958, 15 U.S.T. 471, T.I.A.S. 5578, 449 U.N.T.S. 311 (effective June 10, 1964).

Convention on the High Seas, adopted by the United Nations Conference on the Law of the Sea, April 29, 1958, 13 U.S.T. 2312, T.I.A.S. 5200 (in force 1962).

Convention on the Territorial Sea and the Contiguous Zone, Article 24, 15 U.S.T. 1606, 1608, T.I.A.S. 5639 (in force Sept. 10, 1964).

United Nations Resolutions

Moratorium Resolution, Dec. 15, 1969, A/C. 1/L. 480/ Rev. 1.